

Mayor
Kwasi A. Fraser

Council
Joan Lehr
John A. Nave
Patrick McConville II
Karen Jimmerson
Benjamin J. Packard
Douglass J. McCollum



Town Manager
Robert W. Lohr, Jr.

Assistant Town Manager
J. Patrick Childs

221 S. Nursery Avenue
Purcellville, VA 20132
(540) 338-7421
Fax: (540) 338-6205
www.purcellvilleva.gov

July 28, 2014



Virginia Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193
Attn: Alison Thompson – Water Permits Technical Reviewer

Re: VPDES Permit No. VA0022802, Basham Simms WWTF, Loudoun County

Dear Ms. Thompson:

The Town of Purcellville wishes to reapply for the VPDES permit. Based on the current permit, the Town is submitting the following forms as requested by your office: General Form 1, Form 2A, the Public Notice Billing Information Form, the VPDES Application Addendum, and the Sludge Application.

Please do not hesitate to contact us at (540) 338-5024 or by email if you have any questions or require anything additional.

Sincerely,

A handwritten signature in black ink, appearing to read "Alex Vanegas".

Alex Vanegas, CPM
Director of Public Works



Town of Purcellville

Public Works Department
221 S. Nursery Avenue
Purcellville, VA 20132

Transmittal

Date: July 31, 2014

To: Virginia Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193
Attn: Alison Thompson



From: Scott House

RE: VPDES Permit No. VA0022802 Renewal Application

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ File Copy

ITEM NO.	QUANTITY	DESCRIPTION
1	1	Hardcopy of Renewal Application
2	1	Electronic Copy of Renewal Application (CD in front pocket of binder)



VPDES PERMIT NO. VA0022802
RENEWAL APPLICATION

BASHAM SIMMS WASTEWATER
TREATMENT FACILITY

JULY 2014

PUBLIC NOTICE BILLING INFORMATION

I hereby authorize the Virginia Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in accordance with 9VAC25-31-290.C.2.

Agent/Department to be billed: TOWN OF PURCELLVILLE PUBLIC WORKS

Owner: TOWN OF PURCELLVILLE

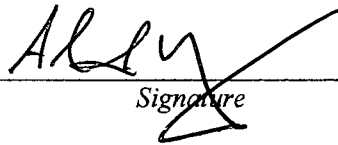
Applicant's Address: ALEX VANEGAS, DIRECTOR OF PUBLIC WORKS

221 S. NURSERY AVENUE

PURCELLVILLE, VA 20132

Agent's Telephone Number: 540-338-5024

Authorizing Agent:


Signature

VPDES Permit No. VA0022802
Basham Simms WWTF

Please return to:

Alison Thompson
VA-DEQ, NRO
13901 Crown Court
Woodbridge, VA 22193-1453
Fax: (703)583-3821

FORM 1 GENERAL	 U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION <i>Consolidated Permits Program</i> <i>(Read the "General Instructions" before starting.)</i>	<table border="1" style="width:100%; border-collapse: collapse;"><tr><td colspan="2">I. EPA I.D. NUMBER</td><td style="width:10%; text-align: center;">T/A</td><td style="width:10%; text-align: center;">C</td></tr><tr><td style="width:5%;">S</td><td style="width:85%;">F</td><td style="width:5%;">VA0022802</td><td style="width:5%;">D</td></tr><tr><td style="width:5%;">1</td><td style="width:85%;">2</td><td style="width:5%;">13</td><td style="width:5%;">14 15</td></tr></table> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;">GENERAL INSTRUCTIONS If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.</div>	I. EPA I.D. NUMBER		T/A	C	S	F	VA0022802	D	1	2	13	14 15																																																																																											
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INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms .																																																																																																									
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VII. SIC CODES (4-digit, in order of priority)

A. FIRST										B. SECOND									
C	7	4	9	5	2	(specify) SEWAGE TREATMENT PLANT					C	7	(specify)						
15	16	19								15	16	19							
C. THIRD										D. FOURTH									
C	7	(specify)								C	7	(specify)							
15	16	19								15	16	19							

VIII. OPERATOR INFORMATION

A. NAME															B. Is the name listed in Item VIII-A also the owner?									
C	8	TOWN OF PURCELLVILLE													<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO									
15	16	55													96									
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: if "Other," specify.)															D. PHONE (area code & no.)									
F = FEDERAL S = STATE P = PRIVATE										M = PUBLIC (other than federal or state) O = OTHER (specify)					M (specify)					A (540) 338-5024				
															56					15 16 18 19 21 22 26				

E. STREET OR P.O. BOX														
221 S. NURSERY AVENUE														
26														

F. CITY OR TOWN										G. STATE		H. ZIP CODE		IX. INDIAN LAND		
C	B	PURCELLVILLE								VA		20132		Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
15	16	40 41								42 47		51		52		

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)										D. PSD (Air Emissions from Proposed Sources)									
C	T	I	9 N VA0022802							C	T	I	9 P 73671 (AIR PERMIT NUMBER)						
15	16	17	30							15	16	17	30						
B. UIC (Underground Injection of Fluids)										E. OTHER (specify)									
C	T	I	9 U							C	T	I	9 VAR051442 (specify) STORM PERMIT						
15	16	17	30							15	16	17	30						
C. RCRA (Hazardous Wastes)										E. OTHER (specify)									
C	T	I	9 R							C	T	I	9 VAN010016 (specify) GENERAL PERMIT FOR NUTRIENTS LOADING LIMITS						
15	16	17	30							15	16	17	30						

XI. MAP

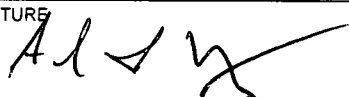
Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements. **SEE ATTACHMENT A**

XII. NATURE OF BUSINESS (provide a brief description)

RECEIVE SEWAGE FROM TOWN OF PURCELLVILLE SYSTEM, TREAT TO WATER QUALITY STANDARDS, AND DISCHARGE TO UNNAMED TRIBUTARY TO NORTH FORK GOOSE CREEK.

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)										B. SIGNATURE										C. DATE SIGNED									
ALEX VANEGAS, CPM, DIRECTOR OF PUBLIC WORKS																				7/28/14									

COMMENTS FOR OFFICIAL USE ONLY

C														
C														
15	16	55												

FACILITY NAME AND PERMIT NUMBER:

BASHAM SIMMS WASTEWATER FACILITY, VA0022802

Form Approved 1/14/99
OMB Number 2040-0086

FORM
2A
NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

- A. Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

- D. Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to provide the information.
- E. Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
 - 1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
 - 2. Any other industrial user that:
 - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
 - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
 - c. Is designated as an SIU by the control authority.
- G. Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

BASHAM SIMMS WASTEWATER FACILITY, VA0022802

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name BASHAM SIMMS WASTEWATER FACILITYMailing Address TOWN OF PURCELLVILLE, 220 S. NURSERY AVENUE, PURCELLVILLE, VA 20132Contact person ALEX VANEGASTitle DIRECTOR OF PUBLIC WORKSTelephone number (540) 751-2314Facility Address 1001 SOUTH 20TH STREET, PURCELLVILLE, VA 20132

(not P.O. Box) _____

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name TOWN OF PURCELLVILLEMailing Address 220 S. NURSERY AVENUE, PURCELLVILLE, VA 20132Contact person SCOTT HOUSETitle FACILITY SUPERVISORTelephone number (540) 338-4945

Is the applicant the owner or operator (or both) of the treatment works?

☒ owner ☒ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☐ facility ☒ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES VA0022802PSD 73671 (AIR PERMIT NUMBER)

UIC _____

Other VAR051442

RCRA _____

Other VAN010016

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
<u>TOWN OF PURCELLVILLE</u>	<u>8,300</u>	<u>SEPARATE</u>	<u>MUNICIPAL</u>
_____	_____	_____	_____
_____	_____	_____	_____

Total population served 8,300

FACILITY NAME AND PERMIT NUMBER:

 Form Approved 1/14/99
 OMB Number 2040-0086

BASHAM SIMMS WASTEWATER FACILITY, VA0022802

A.5. Indian Country.

- a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

- b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

- a. Design flow rate
- 1.5
- mgd

	<u>Two Years Ago</u>	<u>Last Year</u>	<u>This Year</u>
b. Annual average daily flow rate	<u>0.5650</u>	<u>0.6272</u>	<u>0.6128</u> mgd
c. Maximum daily flow rate	<u>2.4600</u>	<u>2.1414</u>	<u>1.7745</u> mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

<input checked="" type="checkbox"/> Separate sanitary sewer	<u>100</u> %
<input type="checkbox"/> Combined storm and sanitary sewer	<u> </u> %

A.8. Discharges and Other Disposal Methods.

- a. Does the treatment works discharge effluent to waters of the U.S.?

☒ Yes ☐ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent	<u>1</u>
ii. Discharges of untreated or partially treated effluent	<u>0</u>
iii. Combined sewer overflow points	<u>0</u>
iv. Constructed emergency overflows (prior to the headworks)	<u>0</u>
v. Other <u>N/A</u>	<u>0</u>

- b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?

☐ Yes ☒ No

If yes, provide the following for each surface impoundment:

 Location: N/A

 Annual average daily volume discharged to surface impoundment(s) N/A mgd

 Is discharge continuous or intermittent?

- c. Does the treatment works land-apply treated wastewater?

☐ Yes ☒ No

If yes, provide the following for each land application site:

 Location: N/A

 Number of acres: N/A

 Annual average daily volume applied to site: N/A Mgd

 Is land application continuous or intermittent?

- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

☐ Yes ☒ No

FACILITY NAME AND PERMIT NUMBER:

BASHAM SIMMS WASTEWATER FACILITY, VA0022802

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If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

N/A

If transport is by a party other than the applicant, provide:

Transporter name: N/AMailing Address: N/AContact person: N/ATitle: N/A

Telephone number: _____

For each treatment works that receives this discharge, provide the following:

Name: N/AMailing Address: N/AContact person: N/ATitle: N/A

Telephone number: _____

If known, provide the NPDES permit number of the treatment works that receives this discharge.

N/A

Provide the average daily flow rate from the treatment works into the receiving facility.

N/A mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)?

_____ Yes

_____ ☒ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

N/A

Annual daily volume disposed of by this method:

N/A

Is disposal through this method

_____ continuous or _____ intermittent?

BASHAM SIMMS WASTEWATER FACILITY, VA0022802

Form Approved 1/14/99
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If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

a. Outfall number 002

b. Location	PURCELLVILLE	20132
	(City or town, if applicable)	(Zip Code)
	LOUDOUN	VIRGINIA
	(County)	(State)
	39.12067	-77.714717
	(Latitude)	(Longitude)

c. Distance from shore (if applicable)	N/A ft.
--	---------

d. Depth below surface (if applicable)	N/A	ft.
--	-----	-----

e. Average daily flow rate 0.6128 mgd

f. Does this outfall have either an intermittent or a periodic discharge? Yes ☒ No (go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs: N/A

Average duration of each discharge: N/A

Average flow per discharge: N/A mgd

Months in which discharge occurs: N/A

g. Is outfall equipped with a diffuser? Yes ☒ No ☐

a. Name of receiving water UNNAMED TRIBUTARY TO NORTH FORK GOOSE CREEK

b. Name of watershed (if known) GOOSE CREEK

United States Soil Conservation Service 14-digit watershed code (if known):

c. Name of State Management/River Basin (if known): POTOMAC RIVER BASIN

United States Geological Survey 8-digit hydrologic cataloging unit code (if known):

d. Critical low flow of receiving stream (if applicable):
acute N/A cfs chronic N/A cfs

e. Total hardness of receiving stream at critical low flow (if applicable): N/A mg/l of CaCO₃

FACILITY NAME AND PERMIT NUMBER:

BASHAM SIMMS WASTEWATER FACILITY, VA0022802

A.11. Description of Treatment.

- a. What levels of treatment are provided? Check all that apply.

☒ Primary ☒ Secondary
☒ Advanced ☒ Other. Describe: NUTRIENT REMOVAL

- b. Indicate the following removal rates (as applicable):

Design BOD₅ removal or Design CBOD₅ removal 96 %
Design SS removal 97 %
Design P removal 96 %
Design N removal 90 %
Other TKN 88 %

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

ULTRAVIOLET RADIATION

If disinfection is by chlorination, is dechlorination used for this outfall?

☐ Yes ☐ No

- d. Does the treatment plant have post aeration?

☒ Yes ☐ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 002

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	7.03	s.u.			
pH (Maximum)	7.73	s.u.			
Flow Rate	1.19/0.91/0.63	MGD	0.91	MGD	3
Temperature (Winter)	13/11/10	degree C	11.3	degree C	3
Temperature (Summer)	24/24/26	degree C	24.7	degree C	3

* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	CBOD-5	<QL	mg/L	<QL	mg/L	3	5210B-2001	3.0/1.34
FECAL COLIFORM E. Coli		1.0	MPN/100	1.0	MPN/100	3	colilert MPN	1.0
TOTAL SUSPENDED SOLIDS (TSS)		<QL	mg/L	<QL	mg/L	3	2540-D1997	0.7/0.24

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

BASHAM SIMMS WASTEWATER FACILITY, VA0022802

Form Approved 1/14/99
OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

RDII: 8000 gpd/in-mi

Briefly explain any steps underway or planned to minimize inflow and infiltration.

Pipe bursting is currently being completed and next year there is \$350,000 in budget for manhole rehabilitation.

sanitary sewer lining, pipe bursting, and point repairs.

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.) **SEE ATTACHMENT A**

- The area surrounding the treatment plant, including all unit processes.
- The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
- Each well where wastewater from the treatment plant is injected underground.
- Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
- Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
- If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram. **SEE ATTACHMENT B**

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ☐ Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: N/A

Mailing Address: N/A

Telephone Number:

Responsibilities of Contractor: N/A

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

- List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

NO IMPROVEMENTS SCHEDULED.

- Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

☐ Yes ☒ No

FACILITY NAME AND PERMIT NUMBER:

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BASHAM SIMMS WASTEWATER FACILITY, VA0022802

- c If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

N/A

- d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule	Actual Completion
	MM / DD / YYYY	MM / DD / YYYY
- Begin construction	___/___/___	___/___/___
- End construction	___/___/___	___/___/___
- Begin discharge	___/___/___	___/___/___
- Attain operational level	___/___/___	___/___/___

- e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained?
- ☐
- Yes
- ☐
- No

Describe briefly: N/A

B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 002

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	<QL	mg/L	<QL	mg/L	3	SM 4500-NH ₃ D-1997	0.1/0.03
CHLORINE (TOTAL RESIDUAL, TRC) UV	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DISSOLVED OXYGEN	10.9	mg/L	10.2	mg/L	3	SM 4500-O ₂ G 2001	N/A
TOTAL KJELDAHL NITROGEN (TKN)	0.81	mg/L	0.53	mg/L	3	SM 4500-NH ₃ D 1997	0.5/0.35
NITRATE PLUS NITRITE NITROGEN	<QL	mg/L	<QL	mg/L	3	HACH 8507 SM 4500-NO ₃ D-2000	NO ₂ 0.0044/0.0089 NO ₃ 0.5/0.1
OIL and GREASE							
PHOSPHORUS (Total)	0.21	mg/L	0.15	mg/L	3	SM 4500-P-P HACH 8190	0.06/0.02
TOTAL DISSOLVED SOLIDS (TDS)							
OTHER							

END OF PART B.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

BASHAM SIMMS WASTEWATER FACILITY, VA0022802

Form Approved 1/14/99
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART C. CERTIFICATION**

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

Basic Application Information packet

Supplemental Application Information packet:



Part D (Expanded Effluent Testing Data)



Part E (Toxicity Testing: Biomonitoring Data)

☐

Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

☐

Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title ALEX VANEGAS, CPM, DIRECTOR OF PUBLIC WORKSSignature Telephone number (540) 751-2314Date signed 7/28/14

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER:

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BASHAM SIMMS WASTEWATER FACILITY, VA0022802

SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old. **SEE ATTACHMENT E**

Outfall number: 002 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY											
ARSENIC											
BERYLLIUM											
CADMIUM											
CHROMIUM											
COPPER											
LEAD											
MERCURY											
NICKEL											
SELENIUM											
SILVER											
THALLIUM											
ZINC											
CYANIDE											
TOTAL PHENOLIC COMPOUNDS											
HARDNESS (AS CaCO ₃)											
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

FACILITY NAME AND PERMIT NUMBER:

BASHAM SIMMS WASTEWATER FACILITY, VA0022802

Form Approved 1/14/99
OMB Number 2040-0086Outfall number: 002 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYL VINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
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BASHAM SIMMS WASTEWATER FACILITY, VA0022802

Outfall number: 002 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE											
1,1,2-TRICHLOROETHANE											
TRICHLORETHYLENE											
VINYL CHLORIDE											

Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.

--	--	--	--	--	--	--	--	--	--	--	--

ACID-EXTRACTABLE COMPOUNDS

P-CHLORO-M-CRESOL											
2-CHLOROPHENOL											
2,4-DICHLOROPHENOL											
2,4-DIMETHYLPHENOL											
4,6-DINITRO-O-CRESOL											
2,4-DINITROPHENOL											
2-NITROPHENOL											
4-NITROPHENOL											
PENTACHLOROPHENOL											
PHENOL											
2,4,6-TRICHLOROPHENOL											

Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.

--	--	--	--	--	--	--	--	--	--	--	--

BASE-NEUTRAL COMPOUNDS.

ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)ANTHRACENE											
BENZO(A)PYRENE											

FACILITY NAME AND PERMIT NUMBER:

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Outfall number: 002 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE											
BENZO(GH)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1,4-DICHLOROBENZENE											
3,3-DICHLOROBENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											
1,2-DIPHENYLHYDRAZINE											

FACILITY NAME AND PERMIT NUMBER:

BASHAM SIMMS WASTEWATER FACILITY, VA0022802

Form Approved 1/14/99
OMB Number 2040-0086Outfall number: 002 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE											
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO-PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLOROBENZENE											

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

--	--	--	--	--	--	--	--	--	--	--	--

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

--	--	--	--	--	--	--	--	--	--	--	--

END OF PART D.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

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BASHAM SIMMS WASTEWATER FACILITY, VA0022802

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA THIS INFORMATION HAS BEEN SUBMITTED PREVIOUSLY.

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____ chronic ____ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: _____ Test number: _____ Test number: _____

a. Test information.

Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			

b. Give toxicity test methods followed.

Manual title			
Edition number and year of publication			
Page number(s)			

c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite			
Grab			

d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection			
After dechlorination			

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Test number: _____

Test number: _____

Test number: _____

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

Acute toxicity

g. Provide the type of test performed.

Static

Static-renewal

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

Salinity

Temperature

Ammonia

Dissolved oxygen

l. Test Results.

Acute:

Percent survival in 100%
effluent

%

%

%

LC₅₀

95% C.I.

%

%

%

Control percent survival

%

%

%

Other (describe)

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Chronic:

NOEC	%	%	%
IC ₂₅	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

___ Yes ___ No If yes, describe: _____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

FACILITY NAME AND PERMIT NUMBER:

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SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

___ Yes ☒ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 0

b. Number of CIUs. 0

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: _____

Mailing Address: _____

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): _____

Raw material(s): _____

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (___ continuous or ___ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (___ continuous or ___ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ___ Yes ___ No

b. Categorical pretreatment standards ___ Yes ___ No

If subject to categorical pretreatment standards, which category and subcategory?

FACILITY NAME AND PERMIT NUMBER:

BASHAM SIMMS WASTEWATER FACILITY, VA0022802

F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

___ Yes ___ No If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ___ Yes ___ No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

___ Truck ___ Rail ___ Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number

Amount

Units

<u>EPA Hazardous Waste Number</u>	<u>Amount</u>	<u>Units</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

___ Yes (complete F.13 through F.15.) ___ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

___ Yes ___ No

If yes, describe the treatment (provide information about the removal efficiency):

b. Is the discharge (or will the discharge be) continuous or intermittent?

___ Continuous

___ Intermittent

If intermittent, describe discharge schedule.

END OF PART F.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

BASHAM SIMMS WASTEWATER FACILITY, VA0022802

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SUPPLEMENTAL APPLICATION INFORMATION

PART G. COMBINED SEWER SYSTEMS

N/A

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

- All CSO discharge points.
- Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

- Locations of major sewer trunk lines, both combined and separate sanitary.
- Locations of points where separate sanitary sewers feed into the combined sewer system.
- Locations of in-line and off-line storage structures.
- Locations of flow-regulating devices.
- Locations of pump stations.

CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

G.3. Description of Outfall.

- Outfall number _____
- Location
(City or town, if applicable) _____ (Zip Code) _____
(County) _____ (State) _____
(Latitude) _____ (Longitude) _____
- Distance from shore (if applicable) _____ ft.
- Depth below surface (if applicable) _____ ft.
- Which of the following were monitored during the last year for this CSO?
____ Rainfall ____ CSO pollutant concentrations ____ CSO frequency
____ CSO flow volume ____ Receiving water quality
- How many storm events were monitored during the last year? _____

G.4. CSO Events.

- Give the number of CSO events in the last year.
_____ events (____ actual or ____ approx.)
- Give the average duration per CSO event.
_____ hours (____ actual or ____ approx.)

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- c. Give the average volume per CSO event.
_____ million gallons (_____ actual or _____ approx.)
- d. Give the minimum rainfall that caused a CSO event in the last year.
_____ inches of rainfall

G.5. Description of Receiving Waters.

- a. Name of receiving water: _____
- b. Name of watershed/river/stream system: _____

United States Soil Conservation Service 14-digit watershed code (if known): _____
- c. Name of State Management/River Basin: _____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

G.6. CSO Operations.

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

**END OF PART G.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM
2A YOU MUST COMPLETE.**

VPDES PERMIT APPLICATION ADDENDUM (FOR VPDES PERMIT NO. VA0022802)

1. Entity to whom the permit is to be issued: TOWN OF PURCELLVILLE
Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. Is this facility located within city or town boundaries? ☒ Yes No

3. Please provide the tax map parcel number for the land where the discharge is located: /44//26/////2/
PIN 489-18-2311

4. What is the design average flow of this facility in million gallons per day (MGD)? 1.5 MGD

5. In addition to the design flow, should the permit be written with limits for any other discharge flow tiers?
Yes No ☒
If yes, please identify the other flow tiers in MGD: N/A
Please consider such issues as if you plan to expand operations during the next five years or if your facility's design flow is considerably greater than your current flow?

6. Nature of operations generating wastewater: RECEIVE SEWAGE FROM TOWN OF PURCELLVILLE
SYSTEM, TREAT TO WATER QUALITY STANDARDS, & DISCHARGE TO UT NORTH FORK
GOOSE CREEK
89 % of flow from domestic connections/sources
11 % of flow from non-domestic connections/sources

7. Mode of discharge: ☒ Continuous ☐ Intermittent ☐ Seasonal
Describe frequency and duration of intermittent and seasonal discharges: N/A

8. Identify the characteristics of the receiving stream at the point just above the facility's discharge point(s):

Stream Characteristic	Outfall Number						
	002						
Never dry, permanent stream							
Usually flowing, sometimes dry, intermittent stream	X						
Wet-weather flow, often dry, ephemeral stream							
Usually or always dry, effluent-dependent stream							
Lake or pond at or below discharge point							
Other:							

9. Approval date(s), if applicable:

O & M Manual OCTOBER 2002 Sludge/Solids Management Plan JUNE 2009

Have there been changes in your operation or procedures since the above approval dates? ☒ Yes No

10. Please provide a list of Materials stored at the facility. Please complete the table below or attach another page if more room is necessary.

Material Storage		
Materials Description	Volume Stored	Spill/Stormwater Prevention Measures
Ferric Chloride	5,000 gallons	Tank in contained area
Methanol	4,000 gallons	Tank in contained area
Citric Acid	1,500 gallons	Tank in contained area
Sodium Hypochlorite	1,500 gallons	Tank in contained area
Polymer	250 gallons	Tank in contained area

11. Please provide the name and email addresses for personnel who will be involved with the reissuance of the VPDES permit:

Name	Title	E-mail Address
ALEX VANEGAS	DIRECTOR OF PUBLIC WORKS	avanegas@purcellvilleva.gov
SCOTT HOUSE	FACILITY SUPERVISOR	shouse@purcellvilleva.gov

12. Would you like your permit sent to you electronically? Yes ☒ No ☐

If "Yes", please list the email address to send it to:

To: avanegas@purcellvilleva.gov cc: shouse@purcellvilleva.gov

FACILITY NAME: Basham Simms WWTF

VPDES PERMIT NUMBER: VA0022802

VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

SCREENING INFORMATION

This application is divided into sections. Sections A pertain to all applicants. The applicability of Sections B, C and D depend on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

1. All applicants must complete Section A (General Information).

2. Will this facility generate sewage sludge? ☒ Yes ☐ No

Will this facility derive a material from sewage sludge? ☐ Yes ☒ No

If you answered Yes to either, complete Section B (Generation Of Sewage Sludge Or Preparation Of A Material Derived From Sewage Sludge).

3. Will this facility apply sewage sludge to the land? ☐ Yes ☒ No

Will sewage sludge from this facility be applied to the land? ☒ Yes ☐ No

If you answered No to both questions above, skip Section C.

If you answered Yes to either, answer the following three questions:

a. Will the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 1-8, as identified in the instructions?
☐ Yes ☒ No

b. Will sewage sludge from this facility be placed in a bag or other container for sale or give-away for application to the land? ☐ Yes ☒ No

c. Will sewage sludge from this facility be sent to another facility for treatment or blending? ☐ Yes ☒ No

If you answered No to all three, complete Section C (Land Application Of Bulk Sewage Sludge).

If you answered Yes to a, b or c, skip Section C.

4. Do you own or operate a surface disposal site? ☐ Yes ☒ No

If Yes, complete Section D (Surface Disposal).

SECTION A. GENERAL INFORMATION

All applicants must complete this section.

1. Facility Information.

- a. Facility name: Basham Simms Wastewater Treatment Facility
- b. Contact person: Alex Vanegas
Title: Director of Public Works
Phone: (540) 751-2314
- c. Mailing address:
Street or P.O. Box: 221 S. Nursery Avenue
City or Town: Purcellville State: VA Zip: 20132
- d. Facility location:
Street or Route #: 1001 South 20th Street
County: Loudoun
City or Town: Purcellville State: VA Zip: 20132
- e. Is this facility a Class I sludge management facility? Yes ☒ No
- f. Facility design flow rate: 1.5 mgd
- g. Total population served: 8,300
- h. Indicate the type of facility:
☒ Publicly owned treatment works (POTW)
☐ Privately owned treatment works
☐ Federally owned treatment works
☐ Blending or treatment operation
☐ Surface disposal site
☐ Other (describe):

2. Applicant Information. If the applicant is different from the above, provide the following:

- a. Applicant name: Alex Vanegas
- b. Mailing address:
Street or P.O. Box: 221 S. Nursery Avenue
City or Town: Purcellville State: VA Zip: 20132
- c. Contact person: Scott House
Title: Facility Supervisor
Phone: (540) 338-4945
- d. Is the applicant the owner or operator (or both) of this facility?
☐ owner ☒ operator
- e. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one)
☐ facility ☒ applicant

3. Permit Information.

- a. Facility's VPDES permit number (if applicable): VA0022802
- b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:
- | | |
|------------------|---|
| Permit Number: | Type of Permit: |
| <u>VAR051442</u> | <u>Storm Water Discharge Permit</u> |
| <u>VAN010016</u> | <u>General Permit for Nutrient Loadings</u> |
| <u>73671</u> | <u>Air Permit</u> |

4. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country? Yes ☒ No If yes, describe:

FACILITY NAME: Basham Simms WWTFVPDES PERMIT NUMBER: VA0022802

5. Topographic Map. Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility: SEE ATTACHMENT A
- Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed.
 - Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.
6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction. SEE ATTACHMENT B
7. Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? ☒ Yes ☐ No
If yes, provide the following for each contractor (attach additional pages if necessary).
Name: Reyc Systems Inc. (Susan Trumbo)
- Mailing address:
Street or P.O. Box: P.O. Box 562
City or Town: Remington State: VA Zip: 22734
Phone: (540) 439-3261
Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge:
SEE ATTACHMENT C
- If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s). SLUDGE IS HAULED BY CONTRACTOR AND LAND APPLIED.
8. Pollutant Concentrations. Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old. SEE ATTACHMENT D FOR LABORATORY REPORTS OF ANALYSIS. SAMPLE DATES ARE 2/5/2013, 5/13/2013, 8/20/2013, 11/4/2013. THE TWO NUMBERS LISTED IN THE CONCENTRATION COLUMN ARE THE AVERAGE AND THE MAXIMUM, RESPECTIVELY.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE DATE	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
Arsenic	4.0, 7.0		SW 6010C	3.0
Cadmium	2.0, 2.0		SW 6010C	2.0
Chromium	--		--	--
Copper	658, 893		SW 6010C	5
Lead	18, 22		SW 6010C	5
Mercury	0.8, 1.3		SW 7471B	0.4
Molybdenum	5.5, 7.0		SW 6010C	5
Nickel	22, 27		SW 6010C	5
Selenium	5.0, 5.0		SW 6010C	5.0
Zinc	780, 926		SW 6010C	5

9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of the application you have completed and are submitting:

☒ Section A (General Information)

☒ Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)

FACILITY NAME: Basham Simms WWTF

VPDES PERMIT NUMBER: VA0022802

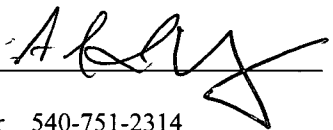
x Section C (Land Application of Bulk Sewage Sludge)

 Section D (Surface Disposal)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Alex Vanegas, CPM, Director of Public Works

Signature



Date Signed

7/28/14

Telephone number 540-751-2314

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

FACILITY NAME: Basham Simms WWTF

VPDES PERMIT NUMBER: VA0022802

**SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION
OF A MATERIAL DERIVED FROM SEWAGE SLUDGE**

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1. Amount Generated On Site.

Total dry metric tons per 365-day period generated at your facility: 120.2 dry metric tons

2. Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.

a. Facility name: N/A

b. Contact Person: N/A

Title:

Phone ()

c. Mailing address: N/A

Street or P.O. Box:

City or Town: _____ State: _____ Zip:

d. Facility Address: N/A

(not P.O. Box)

e. Total dry metric tons per 365-day period received from this facility: N/A dry metric tons

f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:
N/A

3. Treatment Provided at Your Facility.

a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?

 Class A X Class B Neither or unknown

b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Sewage sludge is aerobically digested for 60 days at temperatures greater than or equal to 15 degrees Celsius, and temperatures are greater than or equal to 20 degrees Celsius for 40 of those 60 days.

c. Which vector attraction reduction option is met for the sewage sludge at your facility?

 X Option 1 (Minimum 38 percent reduction in volatile solids)
 Option 2 (Anaerobic process, with bench-scale demonstration)
 Option 3 (Aerobic process, with bench-scale demonstration)
 Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
 Option 5 (Aerobic processes plus raised temperature)
 Option 6 (Raise pH to 12 and retain at 11.5)
 Option 7 (75 percent solids with no unstabilized solids)
 Option 8 (90 percent solids with unstabilized solids)
 None or unknown

d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge: Thickened primary sludge is blended with thickened secondary sludge and digested in aerobic digester.

e. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above: N/A

4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and One of Vector Attraction Reduction Options 1-8 (EQ Sludge). N/A

(If sewage sludge from your facility does not meet all of these criteria, skip Question 4.)

FACILITY NAME: Basham Simms WWTF

VPDES PERMIT NUMBER: VA0022802

- a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land:
_____ dry metric tons
- b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?
___Yes ___No

5. Sale or Give-Away in a Bag or Other Container for Application to the Land. N/A

(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.)

- a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: _____ dry metric tons
- b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

6. Shipment Off Site for Treatment or Blending. N/A

(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.)

- a. Receiving facility name:
- b. Facility contact:
Title:
Phone: ()
- c. Mailing address:
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
- d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: _____ dry metric tons
- e. List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal practices:
Permit Number: _____ Type of Permit: _____

- f. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? ___Yes ___No
Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?
___Class A ___Class B ___Neither or unknown
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge:

- g. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge? ___Yes ___No
Which vector attraction reduction option is met for the sewage sludge at the receiving facility?
___ Option 1 (Minimum 38 percent reduction in volatile solids)
___ Option 2 (Anaerobic process, with bench-scale demonstration)
___ Option 3 (Aerobic process, with bench-scale demonstration)
___ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
___ Option 5 (Aerobic processes plus raised temperature)
___ Option 6 (Raise pH to 12 and retain at 11.5)
___ Option 7 (75 percent solids with no unstabilized solids)
___ Option 8 (90 percent solids with unstabilized solids)
___ None unknown
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge:

- h. Does the receiving facility provide any additional treatment or blending not identified in f or g above?
___Yes ___No
If yes, describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:

- i. If you answered yes to f., g or h above, attach a copy of any information you provide to the receiving facility to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G.
- j. Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? ☐ Yes ☐ No
If yes, provide a copy of all labels or notices that accompany the product being sold or given away.
- k. Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? ☐ Yes ☐ No. If no, provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.
Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week and the times of the day sewage sludge will be transported.

7. Land Application of Bulk Sewage Sludge.

(Complete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6; complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)

- a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: 120.2
dry metric tons
- b. Do you identify all land application sites in Section C of this application? ☐ Yes ☐ No
If no, submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).
- c. Are any land application sites located in States other than Virginia? ☐ Yes ☐ No
If yes, describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.
- d. Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV).

8. Surface Disposal.

(Complete Question 8 if sewage sludge from your facility is placed on a surface disposal site.)

N/A

- a. Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal sites: _____ dry metric tons
- b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?
☐ Yes ☐ No
If no, answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary.
- c. Site name or number:
- d. Contact person:
Title:
Phone: ()
Contact is: ☐ Site Owner ☐ Site operator
- e. Mailing address.
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
- f. Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal site: _____ dry metric tons
- g. List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site:
Permit Number: _____ Type of Permit: _____

9. Incineration. N/A

(Complete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.)

- a. Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewage sludge incinerator: _____ dry metric tons
- b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?
___ Yes ___ No
If no, answer questions c - g for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary.
- c. Incinerator name or number:
- d. Contact person:
Title:
Phone: ()
Contact is: ___ Incinerator Owner ___ Incinerator Operator
- e. Mailing address.
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
- f. Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge incinerator: _____ dry metric tons
- g. List on this form or an attachment the numbers of all other federal, state or local permits that regulate the firing of sewage sludge at this incinerator:
Permit Number: _____ Type of Permit: _____

10. Disposal in a Municipal Solid Waste Landfill. N/A

(Complete Question 10 if sewage sludge from your facility is placed on a municipal solid waste landfill. Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.)

- a. Landfill name:
- b. Contact person:
Title:
Phone: ()
Contact is: ___ Landfill Owner ___ Landfill Operator
- c. Mailing address.
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
- d. Landfill location.
Street or Route #:
County:
City or Town: _____ State: _____ Zip: _____
- e. Total dry metric tons per 365-day period of sewage sludge placed in this municipal solid waste landfill:
_____ dry metric tons
- f. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the operation of this municipal solid waste landfill:
Permit Number: _____ Type of Permit: _____

- g. Does sewage sludge meet applicable requirements in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq., concerning the quality of materials disposed in a municipal solid waste landfill?
___ Yes ___ No
- h. Does the municipal solid waste landfill comply with all applicable criteria set forth in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq.? ___ Yes ___ No
- i. Will the vehicle bed or other container used to transport sewage sludge to the municipal solid waste landfill be watertight and covered? ___ Yes ___ No
Show the haul route(s) on a location map or briefly describe the route below and indicate the days of the week and time of the day sewage sludge will be transported.

SECTION C. LAND APPLICATION OF BULK SEWAGE SLUDGE

Complete this section for sewage sludge that is land applied unless any of the following conditions apply:

The sewage sludge meets the Table 1 ceiling concentrations, the Table 3 pollutant concentrations, Class A pathogen requirements and one of the vector attraction reduction options 1-8 (fill out B.4 instead) (EQ Sludge); or

The sewage sludge is sold or given away in a bag or other container for application to the land (fill out B.5 instead); or

You provide the sewage sludge to another facility for treatment or blending (fill out B.6 instead).

Complete Section C for every site on which the sewage sludge that you reported in B.7 is land applied.

1. Identification of Land Application Site. PER PLANT CONTRACTOR SLUDGE IS APPLIED AT SEVERAL LOCATIONS AND AN ANNUAL REPORT IS FILED WITH DEQ.

- a. Site name or number:
- b. Site location (Complete i and ii)
- i. Street or Route#:
County:
City or Town: _____ State: _____ Zip: _____
- ii. Latitude: _____ Longitude: _____
Method of latitude/longitude determination
_____ USGS map _____ Filed survey _____ Other _____
- c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.

2. Owner Information.

- a. Are you the owner of this land application site? Yes X No
- b. If no, provide the following information about the owner:
Name:
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
Phone: ()

3. Applier Information:

- a. Are you the person who applies, or who is responsible for application of, sewage sludge to this land application site? Yes X No
- b. If no, provide the following information for the person who applies the sewage sludge:
Name: RECY SYSTEMS INC. (SUSAN TRUMBO)

Street or P.O. Box: P.O. BOX 562
City or Town: REMINGTON State: VA Zip: 22734
Phone: (540) 439-3261
- c. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the person who applies sewage sludge to this land application site:
Permit Number: _____ Type of Permit: _____
SEE ATTACHMENT C

4. Site Type. Identify the type of land application site from among the following:

X Agricultural land _____ Reclamation site _____ Forest
_____ Public contact site _____ Other. Describe _____

5. Vector Attraction Reduction.

Are any vector attraction reduction requirements met when sewage sludge is applied to the land application site?

X Yes _____ No If yes, answer a and b.

- a. Indicate which vector attraction reduction option is met:
_____ Option 9 (Injection below land surface)
X Option 10 (Incorporation into soil within 6 hours)
- b. Describe, on this form or on another sheet of paper, any treatment processes used at the land application site to reduce the vector attraction properties of sewage sludge:

6. Cumulative Loadings and Remaining Allotments. N/A

(Complete Question 6 only if the sewage sludge applied to this site since July 20, 1993 is subject to the cumulative pollutant loading rates (CPLRs) - see instructions.)

- a. Have you contacted DEQ or the permitting authority in the state where the sewage sludge subject to the CPLRs will be applied to ascertain whether bulk sewage sludge subject to the CPLRs has been applied to this site since July 20, 1993? ☐ Yes ☐ No

If no, sewage sludge subject to the CPLRs may not be applied to this site.

If yes, provide the following information:

Permitting authority:

Contact person:

Phone: ()

- b. Based upon this inquiry, has bulk sewage sludge subject to the CPLRs been applied to this site since July 20, 1993? ☐ Yes ☐ No If no, skip the rest of Question 6. If yes, answer questions c - e.

- c. Site size, in hectares: _____ (one hectare = 2.471 acres)

- d. Provide the following information for every facility other than yours that is sending or has sent sewage sludge subject to the CPLRs to this site since July 20, 1993. If more than one such facility sends sewage sludge to this site, attach additional pages as necessary.

Facility name:

Facility contact:

Title:

Phone: ()

Mailing address.

Street or P.O. Box:

City or Town: _____ State: _____ Zip: _____

- e. Provide the total loading and allotment remaining, in kg/hectare, for each of the following pollutants:

	<u>Cumulative loading</u>	<u>Allotment remaining</u>
Arsenic	_____	_____
Cadmium	_____	_____
Copper	_____	_____
Lead	_____	_____
Mercury	_____	_____
Nickel	_____	_____
Selenium	_____	_____
Zinc	_____	_____

Complete Questions 7-12 below only if you apply sewage sludge, or you are responsible for land application of sewage sludge. Information required by these questions may be prepared as attachments to this form. Skip the following questions if you contract land application to someone else (as indicated under Section A.7) who is responsible for the operation.

7. Sludge Characterization. Use the table below or a separate attachment, provide at least one analysis for each parameter. N/A

PCBs (mg/kg)
pH (S. U.)
Percent Solids (%)
Ammonium Nitrogen (mg/kg)
Nitrate Nitrogen (mg/kg)
Total Kjeldahl Nitrogen (mg/kg)
Total Phosphorus (mg/kg)
Total Potassium (mg/kg)
Alkalinity as CaCO₃ (mg/kg)

* Lime treated sludge (10% or more lime by dry weight) should be analyzed for percent CaCO₃.

8. Storage Requirements. N/A

Existing and proposed sludge storage facilities must provide an estimated annual sludge balance on a monthly basis incorporating such factors as storage capacity, sludge production and land application schedule. Include pertinent calculations justifying storage requirements.

Proposed sludge storage facilities must also provide the following information:

- a. A sludge storage site layout on a 7.5 minute topographic quadrangle or other appropriate scaled map to show the following topographic features of the surrounding landscape to a distance of 0.25 mile. Clearly mark the property line.

- 1) Water wells, abandoned or operating
- 2) Surface waters
- 3) Springs
- 4) Public water supply(s)
- 5) Sinkholes
- 6) Underground and/or surface mines
- 7) Mine pool (or other) surface water discharge points
- 8) Mining spoil piles and mine dumps
- 9) Quarry(s)
- 10) Sand and gravel pits
- 11) Gas and oil wells
- 12) Diversion ditch(s)
- 13) Agricultural drainage ditch(s)
- 14) Occupied dwellings, including industrial and commercial establishments
- 15) Landfills or dumps
- 16) Other unlined impoundments
- 17) Septic tanks and drainfields
- 18) Injection wells
- 19) Rock outcrops

- b. A topographic map of sufficient detail to clearly show the following information:

- 1) Maximum and minimum percent slopes
- 2) Depressions on the site that may collect water
- 3) Drainageways that may attribute to rainfall run-on to or runoff from this site
- 4) Portions of the site (if any) which are located with the 100-year floodplain and how the storage facility will be protected from flooding

- c. Data and specifications for the storage facility lining material.

- d. Plan and cross-sectional views of the storage facility.

- e. Depth from the bottom of the storage facility to the seasonal high water table and separation distance to the permanent water table.

9. Land Area Requirements. Provide calculations justifying the land area requirements for land application of sewage sludge taking into consideration average soil productivity group, crop(s) to be grown and most limiting factor(s) of the sewage sludge, specifically Plant Available Nitrogen (PAN), Calcium Carbonate Equivalence (CCE), and metal loadings (CPLR sewage sludge only), where applicable. Relate PAN, CCE, and metal loadings to demonstrate the most limiting factor for land application. N/A

10. Landowner Agreement Forms. Provide a properly completed **Land Application Agreement – Biosolids** Form and necessary attachments (attached at end of VPDES Sewage Sludge Permit Application Form) for each landowner if sewage sludge is to be applied onto land not owned by the applicant. N/A

11. Ground Water Monitoring. N/A

Are any ground water monitoring data available for this land application site? Yes No

If yes, submit the ground water monitoring data with this permit application. Also submit a written description of the well locations, approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.

12. Land Application Site Information. N/A

(Complete Items a-d for sites receiving infrequent application - land application of sewage sludge up to the agronomic rate at a frequency of once in a 3 year period; complete Items a-h for sites receiving frequent application - land application of sewage sludge in excess of 70% the agronomic rate at a frequency greater than once in a 3 year period)

- a. Provide a general location map for each county which clearly indicates the location of all the land application sites.
- b. For each land application site provide a site plan of sufficient detail to clearly show the concerned landscape features and associated buffer zones (See instructions). Provide a legend for each landscape feature and the net acreage for each field taking into account the proposed buffer zones.
- c. In order to ensure that land application of bulk sewage sludge will not impact federally listed threatened or endangered species or federally designated critical habitat, the applicant must notify the field office of the U. S. Department of the Interior, Fish and Wildlife Service (FWS), by a letter, the proposed land application activities with the identification of the land application sites. The address and phone number of FWS are provided below.

U. S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
TEL: (804)693-6694

Provide a copy of the notification letter with this application form.

- d. Provide a soil survey map, preferably photographically based, with the field boundaries clearly marked. (A USDA-SCS soil survey map should be provided, if available.)
Provide a detailed legend for each soil survey map which uses accepted USDA-SCS descriptions of the typifying pedon for each soil series (soil type). Complex associations may be described as a range of characteristics. Soil descriptions shall include as a minimum the following information.
 - 1) Soil symbol
 - 2) Soil series, textural phase and slope range
 - 3) Depth to seasonal high water table
 - 4) Depth to bedrock
 - 5) Estimated soil productivity group (for the proposed crop rotation)

Item e - h are required for sites receiving frequent application of sewage sludge

- e. In order to verify the information provided in item d, characterize the soil at each land application site. Representative soil borings or test pits to a depth of five feet or to bedrock if shallower, are to be coordinated for the typifying pedon of each soil series (soil type). Soil descriptions shall include as a minimum the following information:
 - 1). Soil symbol
 - 2). Soil series, textural phase and slope range
 - 3). Depth to seasonal high water table
 - 4). Depth to bedrock
 - 5). Estimated soil productivity group (for the proposed crop rotation)

- f. Collect and analyze soil samples from each field, weighted to best represent each of the soil borings performed for Item e. Using the table below or a separate attachment, provide at least one analysis per sample for each of the following parameters.
- Soil Organic Matter (%)
 - Soil pH (std. units)
 - Cation Exchange Capacity (meq/100g)
 - Total Nitrogen (ppm)
 - Organic Nitrogen (ppm)
 - Ammonia Nitrogen (ppm)
 - Nitrate Nitrogen (ppm)
 - Available Phosphorus (ppm)
 - Exchangeable Potassium (mg/100g)
 - Exchangeable Sodium (mg/100g)
 - Exchangeable Calcium (mg/100g)
 - Exchangeable Magnesium (mg/100g)
 - Arsenic (ppm)
 - Cadmium (ppm)
 - Copper (ppm)
 - Lead (ppm)
 - Mercury (ppm)
 - Molybdenum (ppm)
 - Nickel (ppm)
 - Selenium (ppm)
 - Zinc (ppm)
 - Manganese (ppm)
 - Particle Size Analysis or
USDA Textural Estimate (%)
- g. Relate the crop nutrient needs to anticipated yields, soil productivity rating and the various fertilizer or nutrient sources from sludge and chemical fertilizers. Describe any specialized agronomic management practices which may be required as a result of high soil pH. If the sludge is expected to possess an unusually high CCE or other unusual properties, provide a description of any plant tissue testing, supplemental fertilization or intensive agronomic management practices which may be necessary.
- h. Using a narrative format and referencing any related charts, describe the proposed cropping system. Show how the crop rotation and management will be coordinated with the design of the land application system. Include any supplemental fertilization program, soil testing and the coordination of tillage practices, planting and harvesting schedules and timing of land application.

SECTION D. SURFACE DISPOSAL

Complete this section only if you own or operate a surface disposal site. Provide the information for each active sewage sludge unit. N/A

1. Information on Active Sewage Sludge Units.

- a. Unit name or number:
- b. Unit location
 - i. Street or Route#:
County:
City or Town: _____ State: _____ Zip: _____
 - ii. Latitude: _____ Longitude: _____
Method of latitude/longitude determination
_____ USGS map _____ Filed survey _____ Other _____
- c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.
- d. Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period:
_____ dry metric tons.
- e. Total dry metric tons of sewage sludge placed on the active sewage sludge unit over the life of the unit:
_____ dry metric tons.
- f. Does the active sewage sludge unit have a liner with a minimum hydraulic conductivity of 1×10^{-7} cm/sec? Yes No If yes, describe the liner or attach a description.
- g. Does the active sewage sludge unit have a leachate collection system? Yes No
If yes, describe the leachate collection system or attach a description. Also, describe the method used for leachate disposal and provide the numbers of any federal, state or local permits for leachate disposal:
- h. If you answered no to either f or g, answer the following:
Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site? Yes No If yes, provide the actual distance in meters:
- i. Remaining capacity of active sewage sludge unit, in dry metric tons: _____ dry metric tons
Anticipated closure date for active sewage sludge unit, if known: _____ (MM/DD/YYYY)
Provide with this application a copy of any closure plan developed for this active sewage sludge unit.

2. Sewage Sludge from Other Facilities.

Is sewage sludge sent to this active sewage sludge unit from any facilities other than yours? Yes No
If yes, provide the following information for each such facility, attach additional sheets as necessary.

- a. Facility name:
- b. Facility contact:
Title:
Phone: ()
- c. Mailing address.
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
- d. List, on this form or an attachment, the facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the facility's sewage sludge management practices:
Permit Number: _____ Type of Permit: _____

- e. Which class of pathogen reduction is achieved before sewage sludge leaves the other facility?
Class A Class B Neither or unknown
- f. Describe, on this form or on another sheet of paper, any treatment processes used at the other facility to reduce pathogens in sewage sludge:

- g. Which vector attraction reduction option is achieved before sewage sludge leaves the other facility?
- ☐ Option 1 (Minimum 38 percent reduction in volatile solids)
 - ☐ Option 2 (Anaerobic process, with bench-scale demonstration)
 - ☐ Option 3 (Aerobic process, with bench-scale demonstration)
 - ☐ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
 - ☐ Option 5 (Aerobic processes plus raised temperature)
 - ☐ Option 6 (Raise pH to 12 and retain at 11.5)
 - ☐ Option 7 (75 percent solids with no unstabilized solids)
 - ☐ Option 8 (90 percent solids with unstabilized solids)
 - ☐ None or unknown
- h. Describe, on this form or another sheet of paper, any treatment processes used at the other facility to reduce vector attraction properties of sewage sludge:
- i. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities performed by the other facility that are not identified in e - h above:

3. Vector Attraction Reduction.

- a. Which vector attraction reduction option, if any, is met when sewage sludge is placed on this active sewage sludge unit?
- ☐ Option 9 (Injection below land surface)
 - ☐ Option 10 (Incorporation into soil within 6 hours)
 - ☐ Option 11 (Covering active sewage sludge unit daily)
- b. Describe, on this form or another sheet of paper, any treatment processes used at the active sewage sludge unit to reduce vector attraction properties of sewage sludge:

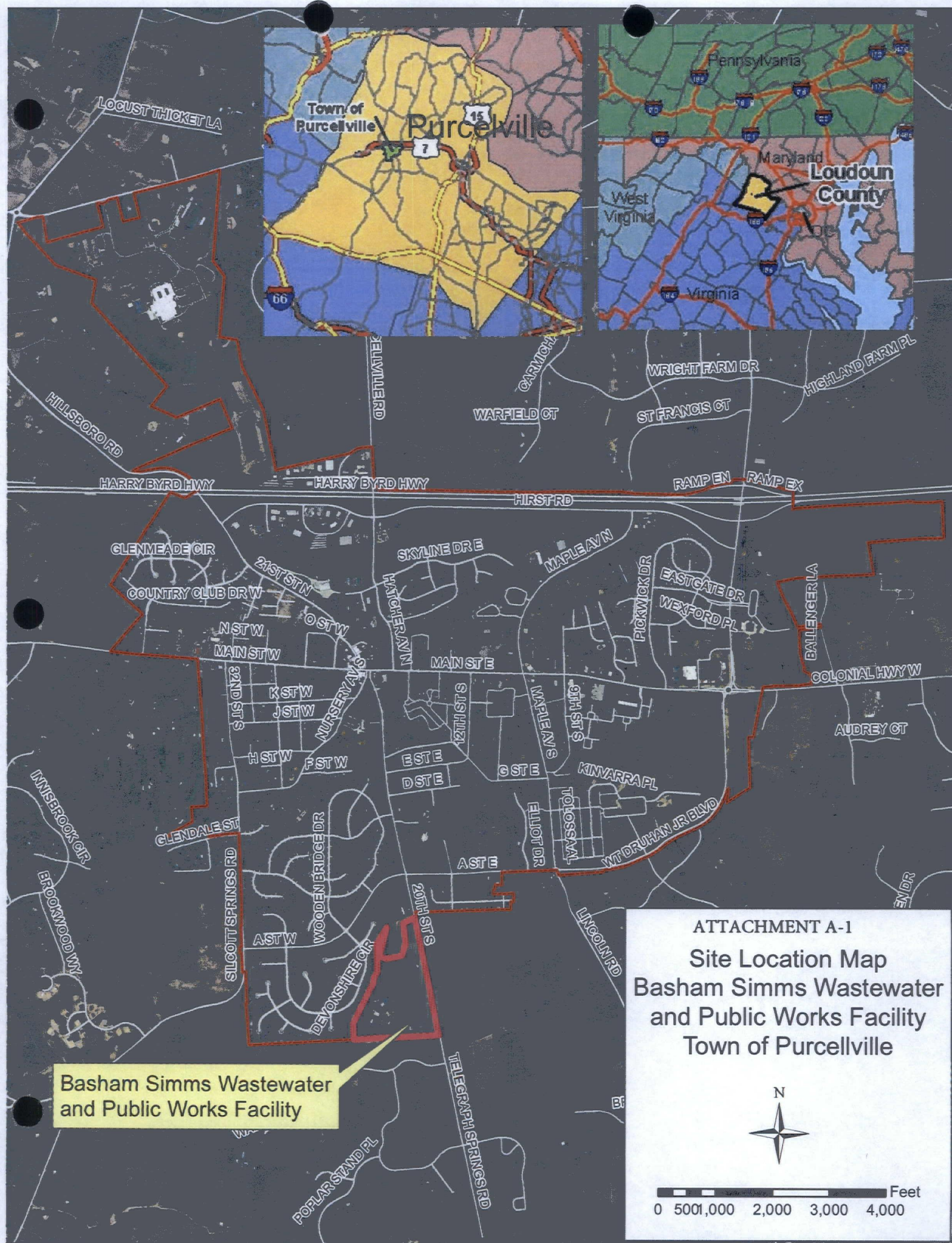
4. Ground Water Monitoring.

- a. Is ground water monitoring currently conducted at this active sewage sludge unit or are ground water monitoring data otherwise available for this active sewage sludge unit? ☐ Yes ☐ No
If yes, provide a copy of available ground water monitoring data. Also provide a written description of the well locations, the approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.
- b. Has a ground water monitoring program been prepared for this active sewage sludge unit?
☐ Yes ☐ No If yes, submit a copy of the ground water monitoring program with this application.
- c. Have you obtained a certification from a qualified ground water scientist that the aquifer below the active sewage sludge unit has not been contaminated? ☐ Yes ☐ No
If yes, submit a copy of the certification with this application.

5. Site-Specific Limits.

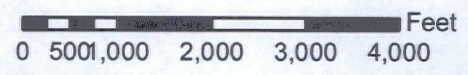
Are you seeking site-specific pollutant limits for the sewage sludge placed on the active sewage sludge unit?
☐ Yes ☐ No If yes, submit information to support the request for site-specific pollutant limits with this application.

ATTACHMENT A - MAPS



Basham Simms Wastewater
and Public Works Facility

ATTACHMENT A-1
Site Location Map
Basham Simms Wastewater
and Public Works Facility
Town of Purcellville







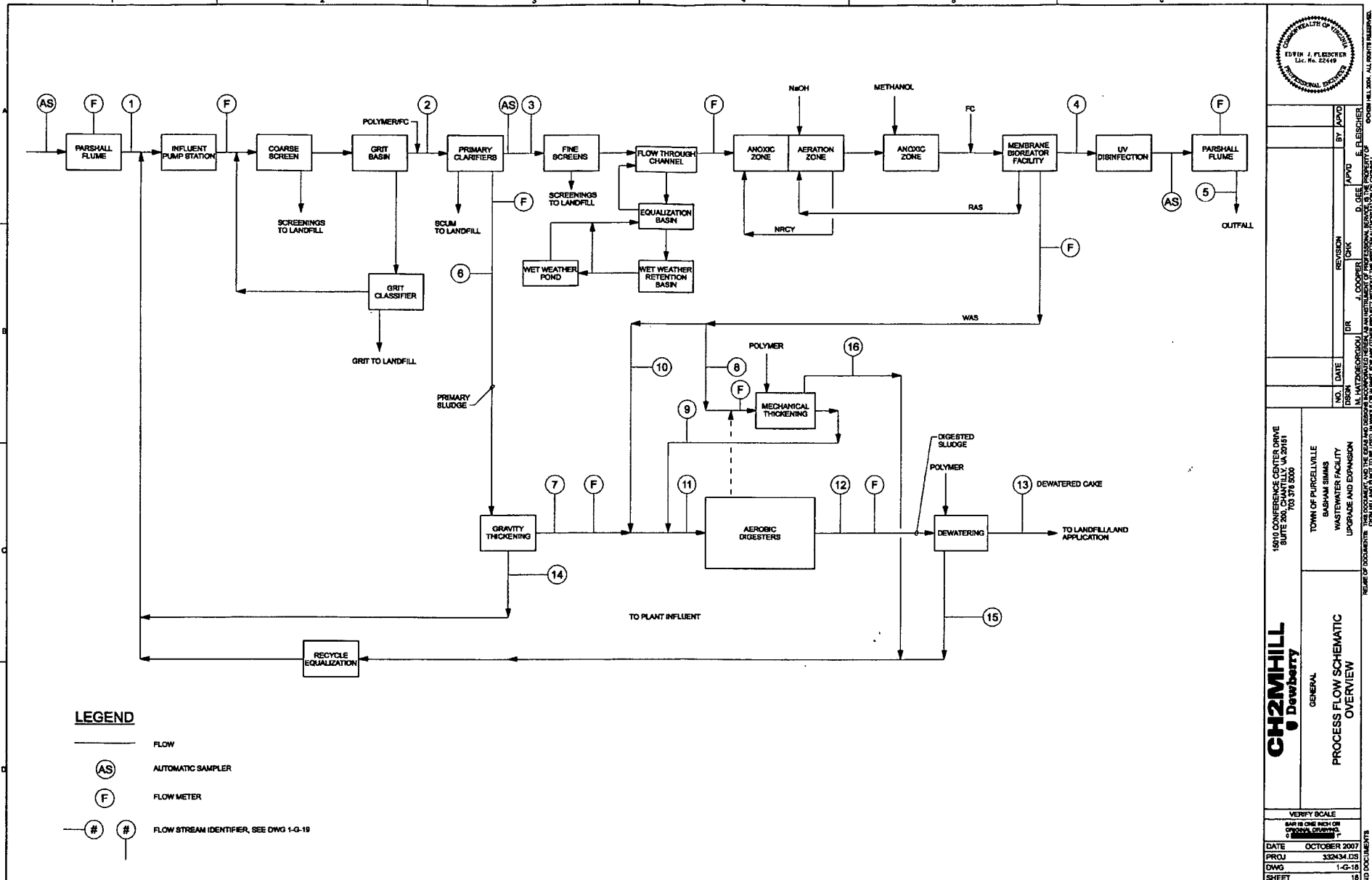
ATTACHMENT A-3
Basham Simms Wastewater Facility
Town of Purcellville, Virginia
Plant Influent and Effluent Discharge



Attachment A-4: Site Map
Basham Simms Wastewater and Public Works Facility
Town of Purcellville, Virginia

ATTACHMENT B – PROCESS FLOW DIAGRAM

ATTACHMENT B



ATTACHMENT C – SLUDGE CONTRACTOR PERMIT LIST

ATTACHMENT C

Recyc Systems, Inc

Permit List

July 1, 2014

Permit Number	Location	Gross Acres	Expiration Date
VPA 01574	ALBEMARLE	7,231.40	07/30/19
VPA 00811	AMELIA	1,638.00	07/13/19
VPA 01583	AUGUSTA	4,936.20	01/31/22
VPA 00842	BRUNSWICK	3,359.50	06/25/23
VPA 00056	CAROLINE	7,459.03	02/17/20
VPA 01572	CLARKE	654.10	07/30/19
VPA 00057	CULPEPER	25,158.30	04/13/20
VPA 00817	DINWIDDIE	8,272.10	08/23/10
VPA 00804	ESSEX	1,502.90	07/26/19
VPA 00054	FAUQUIER	10,205.90	06/24/20
VPA 01582	FLUVANNA	450.50	04/30/21
VPA 01577	GREENE	3,349.50	08/20/19
VPA 00801	HANOVER	5,332.10	07/26/19
VPA 00805	KING & QUEEN	4,772.80	07/13/19
VPA 00826	KING WILLIAM	327.10	10/27/21
VPA 00814	LANCASTER	2,065.80	10/27/19
VPA 00070	LOUISA	777.80	01/25/22
VPA 03010	LUNENBURG	7,392.16	05/09/20
VPA 00800	NEW KENT	857.40	07/13/19
VPA 00816	NORTHUMBERLAND	507.10	03/30/20
VPA 03003	NOTTOWAY	6,853.50	10/18/19
VPA 00061	MADISON	6,349.70	09/07/21
VPA 00820	MIDDLESEX	3,350.00	03/24/21
VPA 00060	ORANGE	11,932.70	09/21/20
VPA 00809	PRINCE GEORGE	541.70	07/13/19
VPA 00821	RICHMOND	1,117.10	07/26/20
VPA 01579	SHENANDOAH	626.50	09/30/09
VPA 01078	SOUTHAMPTON	1,938.52	09/10/19
VPA 00058	SPOTSYLVANIA	2,746.50	09/21/20
VPA 00818	SURRY	774.60	08/23/20
VPA 00827	SUSSEX	1,591.20	02/13/22
VPA 01573	WARREN	1,366.90	08/07/19
VPA 00823	WESTMORELAND	2,600.00	10/11/20

TOTAL PERMITTED ACRES 138,038.61

ATTACHMENT D – SLUDGE LABORATORY REPORTS

Page: 1 of 1

Report Number: 13-037-0210

Account Number: 79432

Submitted By: BRIAN BROWN



www.aaleastern.com

A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: TOWN OF PURCELLVILLE
BRIAN BROWN
221 SOUTH NURSERY AVE
PURCELLVILLE, VA 20132

Project : TOWN OF PURCELLVILLE

Lab Number : 91747

Sample Id : PURCELLVILLE

REPORT OF ANALYSIS

Date Sampled: 2/5/2013 10:30:00

Date Received: 02/06/2013 00:00

Date Reported: 02/11/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	20.05	200500	100.0	JM	02/06/2013 15:00	SM-2540G
Moisture *	79.95		100.0	JM	02/06/2013 15:00	SM-2540G
Total Copper		710	5	KM	02/07/2013 12:14	SW 6010C
Total Zinc		835	5	KM	02/07/2013 12:14	SW 6010C
Total Cadmium		2.0	2.0	KM	02/07/2013 12:14	SW 6010C
Total Nickel		16	5	KM	02/07/2013 12:14	SW 6010C
Total Lead		14	5	KM	02/07/2013 12:14	SW 6010C
Total Arsenic		3.0	3.0	KM	02/07/2013 12:14	SW 6010C
Total Mercury		0.8	0.4	KM	02/07/2013 09:00	SW-7471B
Total Selenium		<5.0	5.0	KM	02/07/2013 12:14	SW 6010C
Total Molybdenum		5	5	KM	02/07/2013 12:14	SW 6010C

Comments:

NELAP ACCREDITED: VA NELAC LAB. # 460014. PA NELAC LAB # 68-03109, FL NELAC LAB # E871087, NJ NELAC LAB # VA011. RESULTS REPORTED MEET ALL REQUIREMENTS OF THE CURRENT NELAC STANDARDS.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-134-0203

Account Number: 79432

Submitted By: DREW SMART


A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

 Send To: TOWN OF PURCELLVILLE
 BRIAN BROWN
 221 SOUTH NURSERY AVE
 PURCELLVILLE, VA 20132

Project : TOWN OF PURCELLVILLE BIOSOLIDS

Lab Number : 93761

Sample Id : BIOSOLIDS

REPORT OF ANALYSIS

Date Sampled: 5/13/2013 09:52:00

Date Received: 05/14/2013 00:00

Date Reported: 05/21/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg')	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	19.15	191500	100.0	JM	05/14/2013 13:59	SM-2540G
Moisture *	80.85		100.0	JM	05/14/2013 13:59	SM-2540G
Total Copper		786	5	KM	05/15/2013 14:21	SW 6010C
Total Zinc		690	5	KM	05/15/2013 14:21	SW 6010C
Total Cadmium		<2.0	2.0	KM	05/15/2013 14:21	SW 6010C
Total Nickel		20	5	KM	05/15/2013 14:21	SW 6010C
Total Lead		16	5	KM	05/15/2013 14:21	SW 6010C
Total Arsenic		3.0	3.0	KM	05/15/2013 14:21	SW 6010C
Total Mercury		1.0	0.4	KM	05/15/2013 09:00	SW-7471B
Total Selenium		<5.0	5.0	KM	05/15/2013 14:21	SW 6010C
Total Molybdenum		<5	5	KM	05/15/2013 14:21	SW 6010C

Comments:

NELAP ACCREDITED: VA NELAC LAB. # 460014. PA NELAC LAB # 68-03109, FL NELAC LAB # E871087, NJ NELAC LAB # VA011. RESULTS REPORTED MEET ALL REQUIREMENTS OF THE CURRENT NELAC STANDARDS. MERCURY NOT FOR COMPLIANCE PURPOSES, ARRIVED OUT OF COMPLIANCE WITH TEMPERATURE REQUIREMENTS.

QUALIFIER: THE MATRIX SPIKE WAS OUT OF LIMITS FOR "Hg". ALL OTHER QC DATA IS ACCEPTABLE.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-233-0202

Account Number: 79432

Submitted By: DREW SMART

**A&L Eastern Laboratories, Inc.**

7621 Whiteline Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: TOWN OF PURCELLVILLE
BRIAN BROWN
221 SOUTH NURSERY AVE
PURCELLVILLE, VA 20132

Project : BASHAM SIMMS WW FACILITY

Lab Number : 95127

Sample Id : BIOSOLIDS

REPORT OF ANALYSIS

Date Sampled: 8/20/2013 09:25:00

Date Received: 08/21/2013 00:00

Date Reported: 08/23/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	26.73	267300	100.0	JM	08/21/2013 13:00	SM-2540G
Moisture *	73.27		100.0	JM	08/21/2013 13:00	SM-2540G
Total Copper		893	5	KM	08/22/2013 12:18	SW 6010C
Total Zinc		926	5	KM	08/22/2013 12:18	SW 6010C
Total Cadmium		2.0	2.0	KM	08/22/2013 12:18	SW 6010C
Total Nickel		25	5	KM	08/22/2013 12:18	SW 6010C
Total Lead		22	5	KM	08/22/2013 12:18	SW 6010C
Total Arsenic		3.0	3.0	KM	08/22/2013 12:18	SW 6010C
Total Mercury		1.3	0.4	KM	08/22/2013 12:00	SW-7471B
Total Selenium		<5.0	5.0	KM	08/22/2013 12:18	SW 6010C
Total Molybdenum		<5	5	KM	08/22/2013 12:18	SW 6010C

Comments:

NELAP ACCREDITED: VA NELAC LAB. # 460014. PA NELAC LAB # 68-03109, FL NELAC LAB # E871087, NJ NELAC LAB # VA011. RESULTS REPORTED MEET ALL REQUIREMENTS OF THE CURRENT NELAC STANDARDS.
PCB'S TO FOLLOW

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Debbie Holt

Report Number: 13-309-0210

Account Number: 79432

Submitted By: A SMART



www.aleastern.com

A&L Eastern Laboratories, Inc.

7821 Whitepine Road Richmond, Virginia 23237 (804) 743-8401 Fax (804) 271-8448

Send To: TOWN OF PURCELLVILLE
BRIAN BROWN
221 SOUTH NURSERY AVE
PURCELLVILLE, VA 20132

Project : BASHAM SIMMS WW FACILITY

Lab Number : 96327

Sample Id : BIOSOLID

REPORT OF ANALYSIS

Date Sampled: 11/4/2013 10:17:00

Date Received: 11/05/2013 00:00

Date Reported: 11/07/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	23.87	238700	100.0	JM	11/05/2013 14:30	SM-2540G
Moisture *	76.13		100.0	JM	11/05/2013 14:30	SM-2540G
Total Copper		242	5	KM	11/06/2013 11:22	SW 6010C
Total Zinc		670	5	KM	11/06/2013 11:22	SW 6010C
Total Cadmium		<2.0	2.0	KM	11/06/2013 11:22	SW 6010C
Total Nickel		27	5	KM	11/06/2013 11:22	SW 6010C
Total Lead		20	5	KM	11/06/2013 11:22	SW 6010C
Total Arsenic		7.0	3.0	KM	11/06/2013 11:22	SW 6010C
Total Mercury		<0.4	0.4	KM	11/06/2013 09:00	SW-7471B
Total Selenium		5.0	5.0	KM	11/06/2013 11:22	SW 6010C
Total Molybdenum		7	5	KM	11/06/2013 11:22	SW 6010C

Comments:

NELAP ACCREDITED: VA NELAC LAB. # 460014. PA NELAC LAB # 68-03109, FL NELAC LAB # E871087, NJ NELAC LAB # VA011. RESULTS REPORTED MEET ALL REQUIREMENTS OF THE CURRENT NELAC STANDARDS.

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Debbie Holt

ATTACHMENT E – EXPANDED EFFLUENT TESTING DATA



ATTACHMENT E-1

Pace Analytical Services, Inc.
9800 Kinsey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

June 13, 2014

Ms. Susan Davis
Town of Purcellville
1001 South 20th St.
Purcellville, VA 20132

RE: Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

Dear Ms. Davis:

Enclosed are the analytical results for sample(s) received by the laboratory on May 16, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tabitha M Dacal
tabitha.dacal@pacelabs.com
Project Manager

Enclosures

cc: Jenny Austin, Town of Purcellville



REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001

Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
West Virginia Certification #: 357
Virginia/VELAP Certification #: 460221

Asheville Certification IDs

2225 Riverside Dr., Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
West Virginia Certification #: 356
Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

Charlotte Certification IDs

9800 Kinney Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
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Pace Analytical Services, Inc.
9800 Kinsey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92201665001	EFFLUENT	Water	05/15/14 07:30	05/16/14 09:45

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92201665001	EFFLUENT	EPA 200.7	JMW	15	PASI-A
		EPA 245.1	MTS	1	PASI-A
		EPA 625	BPJ	63	PASI-C
		EPA 624	GAW	35	PASI-C
		EPA 420.4	DMN	1	PASI-A
		SM 4500-CN-E	JDA	1	PASI-A

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92201665001	EFFLUENT	EPA 200.7	JMW	15	PASI-A
		EPA 245.1	MTS	1	PASI-A
		EPA 625	BPJ	63	PASI-C
		EPA 624	GAW	35	PASI-C
		EPA 420.4	DMN	1	PASI-A
		SM 4500-CN-E	JDA	1	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

Sample: EFFLUENT		Lab ID: 92201665001	Collected: 05/15/14 07:30	Received: 05/16/14 09:45	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP		Analytical Method: EPA 200.7 Preparation Method: EPA 200.7						
Antimony	ND ug/L		5.0	1	05/20/14 15:45	05/21/14 22:00	7440-36-0	
Arsenic	ND ug/L		10.0	1	05/20/14 15:45	05/21/14 22:00	7440-38-2	
Beryllium	ND ug/L		1.0	1	05/20/14 15:45	05/21/14 22:00	7440-41-7	
Cadmium	ND ug/L		1.0	1	05/20/14 15:45	05/21/14 22:00	7440-43-9	
Chromium	ND ug/L		5.0	1	05/20/14 15:45	05/21/14 22:00	7440-47-3	
Copper	ND ug/L		5.0	1	05/20/14 15:45	05/21/14 22:00	7440-50-8	
Hardness, Calcium (SM 2340B)	93700 ug/L		250	1	05/20/14 15:45	05/21/14 22:00		
Hardness, Magnesium (SM 2340B)	46000 ug/L		412	1	05/20/14 15:45	05/21/14 22:00		
Lead	ND ug/L		5.0	1	05/20/14 15:45	05/21/14 22:00	7439-92-1	
Nickel	ND ug/L		5.0	1	05/20/14 15:45	05/21/14 22:00	7440-02-0	
Selenium	ND ug/L		10.0	1	05/20/14 15:45	05/21/14 22:00	7782-49-2	
Silver	ND ug/L		5.0	1	05/20/14 15:45	05/21/14 22:00	7440-22-4	
Thallium	ND ug/L		10.0	1	05/20/14 15:45	05/21/14 22:00	7440-28-0	
Hardness, Total (SM 2340B)	140000 ug/L		662	1	05/20/14 15:45	05/21/14 22:00		
Zinc	37.0 ug/L		10.0	1	05/20/14 15:45	05/21/14 22:00	7440-66-6	
245.1 Mercury		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury	ND ug/L		0.20	1	05/19/14 20:30	05/20/14 22:07	7439-97-6	
625 MSSV		Analytical Method: EPA 625 Preparation Method: EPA 625						
Acenaphthene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	83-32-9	
Acenaphthylene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	208-96-8	
Anthracene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	120-12-7	
Benzidine	ND ug/L		50.0	1	05/22/14 13:00	05/28/14 02:20	92-87-5	
Benzo(a)anthracene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	56-55-3	
Benzo(a)pyrene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	50-32-8	
Benzo(b)fluoranthene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	191-24-2	
Benzo(k)fluoranthene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	207-08-9	
4-Bromophenylphenyl ether	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	101-55-3	
Butylbenzylphthalate	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	85-68-7	
bis(2-Chloroethoxy)methane	ND ug/L		10.0	1	05/22/14 13:00	05/28/14 02:20	111-91-1	
bis(2-Chloroethyl) ether	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	111-44-4	
bis(2-Chloroisopropyl) ether	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	108-60-1	
2-Chloronaphthalene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	91-58-7	
2-Chlorophenol	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	95-57-8	
4-Chlorophenylphenyl ether	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	7005-72-3	
Chrysene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	53-70-3	
1,2-Dichlorobenzene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	95-50-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	541-73-1	
1,4-Dichlorobenzene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	106-46-7	
3,3'-Dichlorobenzidine	ND ug/L		25.0	1	05/22/14 13:00	05/28/14 02:20	91-94-1	
2,4-Dichlorophenol	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	120-83-2	
Diethylphthalate	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	84-66-2	
2,4-Dimethylphenol	ND ug/L		10.0	1	05/22/14 13:00	05/28/14 02:20	105-67-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

Sample: EFFLUENT		Lab ID: 92201665001	Collected: 05/15/14 07:30	Received: 05/16/14 09:45	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

625 MSSV

Analytical Method: EPA 625 Preparation Method: EPA 625

Dimethylphthalate	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	131-11-3
Di-n-butylphthalate	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	84-74-2
4,6-Dinitro-2-methylphenol	ND ug/L	20.0	1	05/22/14 13:00	05/28/14 02:20	534-52-1
2,4-Dinitrophenol	ND ug/L	50.0	1	05/22/14 13:00	05/28/14 02:20	51-28-5
2,4-Dinitrotoluene	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	121-14-2
2,6-Dinitrotoluene	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	606-20-2
Di-n-octylphthalate	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	117-84-0
1,2-Diphenylhydrazine	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	122-66-7
bis(2-Ethylhexyl)phthalate	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	117-81-7
Fluoranthene	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	206-44-0
Fluorene	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	86-73-7
Hexachloro-1,3-butadiene	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	87-68-3
Hexachlorobenzene	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	118-74-1
Hexachlorocyclopentadiene	ND ug/L	10.0	1	05/22/14 13:00	05/28/14 02:20	77-47-4
Hexachloroethane	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	67-72-1
Indeno(1,2,3-cd)pyrene	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	193-39-5
Isophorone	ND ug/L	10.0	1	05/22/14 13:00	05/28/14 02:20	78-59-1
3&4-Methylphenol(m&p Cresol)	ND ug/L	10.0	1	05/22/14 13:00	05/28/14 02:20	
Naphthalene	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	91-20-3
Nitrobenzene	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	98-95-3
2-Nitrophenol	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	88-75-5
4-Nitrophenol	ND ug/L	50.0	1	05/22/14 13:00	05/28/14 02:20	100-02-7
N-Nitrosodimethylamine	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	62-75-9
N-Nitroso-di-n-propylamine	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	621-64-7
N-Nitrosodiphenylamine	ND ug/L	10.0	1	05/22/14 13:00	05/28/14 02:20	86-30-6
Pentachlorophenol	ND ug/L	10.0	1	05/22/14 13:00	05/28/14 02:20	87-86-5
Phenanthrene	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	85-01-8
Phenol	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	108-95-2
Pyrene	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	129-00-0
1,2,4-Trichlorobenzene	ND ug/L	5.0	1	05/22/14 13:00	05/28/14 02:20	120-82-1
2,4,6-Trichlorophenol	ND ug/L	10.0	1	05/22/14 13:00	05/28/14 02:20	88-06-2

Surrogates

Nitrobenzene-d5 (S)	49 %	10-120	1	05/22/14 13:00	05/28/14 02:20	4165-60-0
2-Fluorobiphenyl (S)	38 %	15-120	1	05/22/14 13:00	05/28/14 02:20	321-60-8
Terphenyl-d14 (S)	78 %	11-131	1	05/22/14 13:00	05/28/14 02:20	1718-51-0
Phenol-d6 (S)	14 %	10-120	1	05/22/14 13:00	05/28/14 02:20	13127-88-3
2-Fluorophenol (S)	20 %	10-120	1	05/22/14 13:00	05/28/14 02:20	367-12-4
2,4,6-Tribromophenol (S)	51 %	10-137	1	05/22/14 13:00	05/28/14 02:20	118-79-6

624 Volatile Organics

Analytical Method: EPA 624

Acrolein	ND ug/L	5.0	1	05/20/14 06:59	107-02-8
Acrylonitrile	ND ug/L	50.0	1	05/20/14 06:59	107-13-1
Benzene	ND ug/L	2.0	1	05/20/14 06:59	71-43-2
Bromodichloromethane	ND ug/L	2.0	1	05/20/14 06:59	75-27-4
Bromoform	ND ug/L	2.0	1	05/20/14 06:59	75-25-2
Bromomethane	ND ug/L	2.0	1	05/20/14 06:59	74-83-9
Carbon tetrachloride	ND ug/L	2.0	1	05/20/14 06:59	56-23-5

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

Sample: EFFLUENT		Lab ID: 92201665001	Collected: 05/15/14 07:30	Received: 05/16/14 09:45	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
625 MSSV		Analytical Method: EPA 625 Preparation Method: EPA 625						
Dimethylphthalate	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	131-11-3	
Di-n-butylphthalate	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	84-74-2	
4,6-Dinitro-2-methylphenol	ND ug/L		20.0	1	05/22/14 13:00	05/28/14 02:20	534-52-1	
2,4-Dinitrophenol	ND ug/L		50.0	1	05/22/14 13:00	05/28/14 02:20	51-28-5	
2,4-Dinitrotoluene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	121-14-2	
2,6-Dinitrotoluene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	606-20-2	
Di-n-octylphthalate	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	117-84-0	
1,2-Diphenylhydrazine	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	122-66-7	
bis(2-Ethylhexyl)phthalate	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	117-81-7	
Fluoranthene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	206-44-0	
Fluorene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	86-73-7	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	87-68-3	
Hexachlorobenzene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	118-74-1	
Hexachlorocyclopentadiene	ND ug/L		10.0	1	05/22/14 13:00	05/28/14 02:20	77-47-4	
Hexachloroethane	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	67-72-1	
Indeno(1,2,3-cd)pyrene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	193-39-5	
Isophorone	ND ug/L		10.0	1	05/22/14 13:00	05/28/14 02:20	78-59-1	
3&4-Methylphenol(m&p Cresol)	ND ug/L		10.0	1	05/22/14 13:00	05/28/14 02:20		
Naphthalene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	91-20-3	
Nitrobenzene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	98-95-3	
2-Nitrophenol	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	88-75-5	
4-Nitrophenol	ND ug/L		50.0	1	05/22/14 13:00	05/28/14 02:20	100-02-7	
N-Nitrosodimethylamine	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	62-75-9	
N-Nitroso-di-n-propylamine	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	621-64-7	
N-Nitrosodiphenylamine	ND ug/L		10.0	1	05/22/14 13:00	05/28/14 02:20	86-30-6	
Pentachlorophenol	ND ug/L		10.0	1	05/22/14 13:00	05/28/14 02:20	87-86-5	
Phenanthrene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	85-01-8	
Phenol	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	108-95-2	
Pyrene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	129-00-0	
1,2,4-Trichlorobenzene	ND ug/L		5.0	1	05/22/14 13:00	05/28/14 02:20	120-82-1	
2,4,6-Trichlorophenol	ND ug/L		10.0	1	05/22/14 13:00	05/28/14 02:20	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	49 %		10-120	1	05/22/14 13:00	05/28/14 02:20	4165-60-0	
2-Fluorobiphenyl (S)	38 %		15-120	1	05/22/14 13:00	05/28/14 02:20	321-60-8	
Terphenyl-d14 (S)	78 %		11-131	1	05/22/14 13:00	05/28/14 02:20	1718-51-0	
Phenol-d6 (S)	14 %		10-120	1	05/22/14 13:00	05/28/14 02:20	13127-88-3	
2-Fluorophenol (S)	20 %		10-120	1	05/22/14 13:00	05/28/14 02:20	367-12-4	
2,4,6-Tribromophenol (S)	51 %		10-137	1	05/22/14 13:00	05/28/14 02:20	118-79-6	

624 Volatile Organics

Analytical Method: EPA 624

Acrolein	ND ug/L	5.0	1	05/20/14 06:59	107-02-8
Acrylonitrile	ND ug/L	50.0	1	05/20/14 06:59	107-13-1
Benzene	ND ug/L	2.0	1	05/20/14 06:59	71-43-2
Bromodichloromethane	ND ug/L	2.0	1	05/20/14 06:59	75-27-4
Bromoform	ND ug/L	2.0	1	05/20/14 06:59	75-25-2
Bromomethane	ND ug/L	2.0	1	05/20/14 06:59	74-83-9
Carbon tetrachloride	ND ug/L	2.0	1	05/20/14 06:59	56-23-5

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

Sample: EFFLUENT		Lab ID: 92201665001	Collected: 05/15/14 07:30	Received: 05/16/14 09:45	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics		Analytical Method: EPA 624						
Chlorobenzene	ND ug/L		2.0	1		05/20/14 06:59	108-90-7	
Chloroethane	ND ug/L		2.0	1		05/20/14 06:59	75-00-3	
2-Chloroethylvinyl ether	ND ug/L		5.0	1		05/20/14 06:59	110-75-8	
Chloroform	ND ug/L		2.0	1		05/20/14 06:59	67-66-3	
Chloromethane	ND ug/L		2.0	1		05/20/14 06:59	74-87-3	
Dibromochloromethane	ND ug/L		2.0	1		05/20/14 06:59	124-48-1	
1,2-Dichlorobenzene	ND ug/L		2.0	1		05/20/14 06:59	95-50-1	
1,3-Dichlorobenzene	ND ug/L		2.0	1		05/20/14 06:59	541-73-1	
1,4-Dichlorobenzene	ND ug/L		2.0	1		05/20/14 06:59	106-46-7	
1,1-Dichloroethane	ND ug/L		2.0	1		05/20/14 06:59	75-34-3	
1,2-Dichloroethane	ND ug/L		2.0	1		05/20/14 06:59	107-06-2	
1,1-Dichloroethene	ND ug/L		2.0	1		05/20/14 06:59	75-35-4	
trans-1,2-Dichloroethene	ND ug/L		2.0	1		05/20/14 06:59	156-60-5	
1,2-Dichloropropane	ND ug/L		2.0	1		05/20/14 06:59	78-87-5	
cis-1,3-Dichloropropene	ND ug/L		2.0	1		05/20/14 06:59	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		2.0	1		05/20/14 06:59	10061-02-6	
Ethylbenzene	ND ug/L		2.0	1		05/20/14 06:59	100-41-4	
Methylene Chloride	ND ug/L		2.0	1		05/20/14 06:59	75-09-2	
1,1,2,2-Tetrachloroethane	ND ug/L		2.0	1		05/20/14 06:59	79-34-5	
Tetrachloroethene	ND ug/L		2.0	1		05/20/14 06:59	127-18-4	
Toluene	ND ug/L		2.0	1		05/20/14 06:59	108-88-3	
1,1,1-Trichloroethane	ND ug/L		2.0	1		05/20/14 06:59	71-55-6	
1,1,2-Trichloroethane	ND ug/L		2.0	1		05/20/14 06:59	79-00-5	
Trichloroethene	ND ug/L		2.0	1		05/20/14 06:59	79-01-6	
Vinyl chloride	ND ug/L		2.0	1		05/20/14 06:59	75-01-4	
Surrogates								
4-Bromofluorobenzene (S)	88 %		70-130	1		05/20/14 06:59	460-00-4	
Toluene-d8 (S)	98 %		70-130	1		05/20/14 06:59	2037-26-5	
1,2-Dichloroethane-d4 (S)	104 %		70-130	1		05/20/14 06:59	17060-07-0	
420.4 Phenolics, Total		Analytical Method: EPA 420.4						
Phenol	0.035 mg/L		0.0050	1		06/03/14 20:59	108-95-2	
4500CNE Cyanide, Total		Analytical Method: SM 4500-CN-E						
Cyanide	ND mg/L		0.0050	1		05/27/14 15:02	57-12-5	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

QC Batch: MERP/6626 Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 Analysis Description: 245.1 Mercury
Associated Lab Samples: 92201665001

METHOD BLANK: 1202298 Matrix: Water
Associated Lab Samples: 92201665001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	05/20/14 21:11	

LABORATORY CONTROL SAMPLE: 1202299

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.4	96	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1202300 1202301

Parameter	Units	92201460003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	0.44	2.5	2.5	1.2	0.90	29	18	70-130	26	20	M1,R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1202302 1202303

Parameter	Units	92201808003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	1.5	2.5	2.5	3.7	3.4	91	79	70-130	8	20	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

QC Batch: MERP/6626 Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 Analysis Description: 245.1 Mercury
Associated Lab Samples: 92201665001

METHOD BLANK: 1202298 Matrix: Water
Associated Lab Samples: 92201665001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	05/20/14 21:11	

LABORATORY CONTROL SAMPLE: 1202299

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.4	96	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1202300 1202301

Parameter	Units	92201460003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Mercury	ug/L	0.44	2.5	2.5	1.2	0.90	29	18	70-130	26	20 M1,R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1202302 1202303

Parameter	Units	92201808003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Mercury	ug/L	1.5	2.5	2.5	3.7	3.4	91	79	70-130	8	20

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

QC Batch: MPRP/15999 Analysis Method: EPA 200.7
QC Batch Method: EPA 200.7 Analysis Description: 200.7 MET
Associated Lab Samples: 92201665001

METHOD BLANK: 1202860 Matrix: Water
Associated Lab Samples: 92201665001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	05/21/14 20:38	
Arsenic	ug/L	ND	10.0	05/21/14 20:38	
Beryllium	ug/L	ND	1.0	05/21/14 20:38	
Cadmium	ug/L	ND	1.0	05/21/14 20:38	
Chromium	ug/L	ND	5.0	05/21/14 20:38	
Copper	ug/L	ND	5.0	05/21/14 20:38	
Hardness, Calcium (SM 2340B)	ug/L	ND	250	05/21/14 20:38	
Hardness, Magnesium (SM 2340B)	ug/L	ND	412	05/21/14 20:38	
Hardness, Total (SM 2340B)	ug/L	ND	662	05/21/14 20:38	
Lead	ug/L	ND	5.0	05/21/14 20:38	
Nickel	ug/L	ND	5.0	05/21/14 20:38	
Selenium	ug/L	ND	10.0	05/21/14 20:38	
Silver	ug/L	ND	5.0	05/21/14 20:38	
Thallium	ug/L	ND	10.0	05/21/14 20:38	
Zinc	ug/L	ND	10.0	05/21/14 20:38	

LABORATORY CONTROL SAMPLE: 1202861

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	468	94	85-115	
Arsenic	ug/L	500	449	90	85-115	
Beryllium	ug/L	500	461	92	85-115	
Cadmium	ug/L	500	471	94	85-115	
Chromium	ug/L	500	470	94	85-115	
Copper	ug/L	500	452	90	85-115	
Hardness, Calcium (SM 2340B)	ug/L		11700			
Hardness, Magnesium (SM 2340B)	ug/L		19400			
Hardness, Total (SM 2340B)	ug/L		31100			
Lead	ug/L	500	462	92	85-115	
Nickel	ug/L	500	467	93	85-115	
Selenium	ug/L	500	446	89	85-115	
Silver	ug/L	250	235	94	85-115	
Thallium	ug/L	500	445	89	85-115	
Zinc	ug/L	500	462	92	85-115	

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REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:			1202862		1202863							
Parameter	Units	92201088001	MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual	
		Result	Spike	Spike								Result
			Conc.	Conc.								
Antimony	ug/L	ND	500	500	480	478	96	95	70-130	0	20	
Arsenic	ug/L	ND	500	500	464	468	93	93	70-130	1	20	
Beryllium	ug/L	ND	500	500	473	473	95	95	70-130	0	20	
Cadmium	ug/L	ND	500	500	475	475	95	95	70-130	0	20	
Chromium	ug/L	ND	500	500	476	475	95	95	70-130	0	20	
Copper	ug/L	5.0	500	500	471	468	93	93	70-130	1	20	
Hardness, Calcium (SM 2340B)	ug/L	10500			22600	22500				0	20	
Hardness, Magnesium (SM 2340B)	ug/L	4340			23600	23600				0	20	
Hardness, Total (SM 2340B)	ug/L	14900			46200	46100				0	20	
Lead	ug/L	ND	500	500	462	459	92	92	70-130	1	20	
Nickel	ug/L	ND	500	500	471	471	94	94	70-130	0	20	
Selenium	ug/L	ND	500	500	454	457	91	91	70-130	1	20	
Silver	ug/L	ND	250	250	237	238	95	95	70-130	0	20	
Thallium	ug/L	ND	500	500	436	436	87	87	70-130	0	20	
Zinc	ug/L	37.6	500	500	506	506	94	94	70-130	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1202873 1202874												
Parameter	Units	92201642001	MS	MSD	MS	MSD	MS	MSD	% Rec	Max		Qual
		Result	Spike	Spike						Result	Result	
			Conc.	Conc.								
Antimony	ug/L	ND	500	500	478	477	95	95	70-130	0	20	
Arsenic	ug/L	ND	500	500	466	454	93	91	70-130	3	20	
Beryllium	ug/L	ND	500	500	476	468	95	94	70-130	2	20	
Cadmium	ug/L	ND	500	500	479	470	96	94	70-130	2	20	
Chromium	ug/L	ND	500	500	481	472	96	94	70-130	2	20	
Copper	ug/L	ND	500	500	466	464	92	92	70-130	0	20	
Hardness, Calcium (SM 2340B)	ug/L	11900			24100	23600					2	20
Hardness, Magnesium (SM 2340B)	ug/L	2510			22200	21900					1	20
Hardness, Total (SM 2340B)	ug/L	14400			46300	45500					2	20
Lead	ug/L	ND	500	500	471	465	94	93	70-130	1	20	
Nickel	ug/L	ND	500	500	480	471	96	94	70-130	2	20	
Selenium	ug/L	ND	500	500	460	457	92	91	70-130	1	20	
Silver	ug/L	ND	250	250	240	236	96	94	70-130	2	20	
Thallium	ug/L	ND	500	500	449	451	90	90	70-130	0	20	
Zinc	ug/L	19.4	500	500	487	478	94	92	70-130	2	20	

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REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1202862 1202863												
Parameter	Units	92201088001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	480	478	96	95	70-130	0	20	
Arsenic	ug/L	ND	500	500	464	468	93	93	70-130	1	20	
Beryllium	ug/L	ND	500	500	473	473	95	95	70-130	0	20	
Cadmium	ug/L	ND	500	500	475	475	95	95	70-130	0	20	
Chromium	ug/L	ND	500	500	476	475	95	95	70-130	0	20	
Copper	ug/L	5.0	500	500	471	468	93	93	70-130	1	20	
Hardness, Calcium (SM 2340B)	ug/L	10500			22600	22500				0	20	
Hardness, Magnesium (SM 2340B)	ug/L	4340			23600	23600				0	20	
Hardness, Total (SM 2340B)	ug/L	14900			46200	46100				0	20	
Lead	ug/L	ND	500	500	462	459	92	92	70-130	1	20	
Nickel	ug/L	ND	500	500	471	471	94	94	70-130	0	20	
Selenium	ug/L	ND	500	500	454	457	91	91	70-130	1	20	
Silver	ug/L	ND	250	250	237	238	95	95	70-130	0	20	
Thallium	ug/L	ND	500	500	436	436	87	87	70-130	0	20	
Zinc	ug/L	37.6	500	500	506	506	94	94	70-130	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1202873 1202874												
Parameter	Units	92201642001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	478	477	95	95	70-130	0	20	
Arsenic	ug/L	ND	500	500	466	454	93	91	70-130	3	20	
Beryllium	ug/L	ND	500	500	476	468	95	94	70-130	2	20	
Cadmium	ug/L	ND	500	500	479	470	96	94	70-130	2	20	
Chromium	ug/L	ND	500	500	481	472	96	94	70-130	2	20	
Copper	ug/L	ND	500	500	466	464	92	92	70-130	0	20	
Hardness, Calcium (SM 2340B)	ug/L	11900			24100	23600				2	20	
Hardness, Magnesium (SM 2340B)	ug/L	2510			22200	21900				1	20	
Hardness, Total (SM 2340B)	ug/L	14400			46300	45500				2	20	
Lead	ug/L	ND	500	500	471	465	94	93	70-130	1	20	
Nickel	ug/L	ND	500	500	480	471	96	94	70-130	2	20	
Selenium	ug/L	ND	500	500	460	457	92	91	70-130	1	20	
Silver	ug/L	ND	250	250	240	236	96	94	70-130	2	20	
Thallium	ug/L	ND	500	500	449	451	90	90	70-130	0	20	
Zinc	ug/L	19.4	500	500	487	478	94	92	70-130	2	20	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

QC Batch: MSV/26872	Analysis Method: EPA 624
QC Batch Method: EPA 624	Analysis Description: 624 MSV
Associated Lab Samples: 92201665001	

METHOD BLANK: 1202236 Matrix: Water
Associated Lab Samples: 92201665001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	2.0	05/20/14 00:43	
1,1,2,2-Tetrachloroethane	ug/L	ND	2.0	05/20/14 00:43	
1,1,2-Trichloroethane	ug/L	ND	2.0	05/20/14 00:43	
1,1-Dichloroethane	ug/L	ND	2.0	05/20/14 00:43	
1,1-Dichloroethene	ug/L	ND	2.0	05/20/14 00:43	
1,2-Dichlorobenzene	ug/L	ND	2.0	05/20/14 00:43	
1,2-Dichloroethane	ug/L	ND	2.0	05/20/14 00:43	
1,2-Dichloropropane	ug/L	ND	2.0	05/20/14 00:43	
1,3-Dichlorobenzene	ug/L	ND	2.0	05/20/14 00:43	
1,4-Dichlorobenzene	ug/L	ND	2.0	05/20/14 00:43	
2-Chloroethylvinyl ether	ug/L	ND	5.0	05/20/14 00:43	
Acrolein	ug/L	ND	5.0	05/20/14 00:43	
Acrylonitrile	ug/L	ND	50.0	05/20/14 00:43	
Benzene	ug/L	ND	2.0	05/20/14 00:43	
Bromodichloromethane	ug/L	ND	2.0	05/20/14 00:43	
Bromoform	ug/L	ND	2.0	05/20/14 00:43	
Bromomethane	ug/L	ND	2.0	05/20/14 00:43	
Carbon tetrachloride	ug/L	ND	2.0	05/20/14 00:43	
Chlorobenzene	ug/L	ND	2.0	05/20/14 00:43	
Chloroethane	ug/L	ND	2.0	05/20/14 00:43	
Chloroform	ug/L	ND	2.0	05/20/14 00:43	
Chloromethane	ug/L	ND	2.0	05/20/14 00:43	
cis-1,3-Dichloropropene	ug/L	ND	2.0	05/20/14 00:43	
Dibromochloromethane	ug/L	ND	2.0	05/20/14 00:43	
Ethylbenzene	ug/L	ND	2.0	05/20/14 00:43	
Methylene Chloride	ug/L	ND	2.0	05/20/14 00:43	
Tetrachloroethene	ug/L	ND	2.0	05/20/14 00:43	
Toluene	ug/L	ND	2.0	05/20/14 00:43	
trans-1,2-Dichloroethene	ug/L	ND	2.0	05/20/14 00:43	
trans-1,3-Dichloropropene	ug/L	ND	2.0	05/20/14 00:43	
Trichloroethene	ug/L	ND	2.0	05/20/14 00:43	
Vinyl chloride	ug/L	ND	2.0	05/20/14 00:43	
1,2-Dichloroethane-d4 (S)	%	101	70-130	05/20/14 00:43	
4-Bromofluorobenzene (S)	%	98	70-130	05/20/14 00:43	
Toluene-d8 (S)	%	97	70-130	05/20/14 00:43	

LABORATORY CONTROL SAMPLE: 1202237

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.9	104	52-162	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

LABORATORY CONTROL SAMPLE: 1202237

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	20	21.7	109	46-157	
1,1,2-Trichloroethane	ug/L	20	22.0	110	52-150	
1,1-Dichloroethane	ug/L	20	21.1	105	59-155	
1,1-Dichloroethene	ug/L	20	21.4	107	1-234	
1,2-Dichlorobenzene	ug/L	20	22.2	111	18-190	
1,2-Dichloroethane	ug/L	20	21.9	110	49-155	
1,2-Dichloropropane	ug/L	20	21.4	107	1-210	
1,3-Dichlorobenzene	ug/L	20	21.2	106	59-156	
1,4-Dichlorobenzene	ug/L	20	21.8	109	18-190	
2-Chloroethylvinyl ether	ug/L	40	40.1	100	1-305	
Acrolein	ug/L	100	91.3	91	15-152	
Acrylonitrile	ug/L	100	107	107	75-132	
Benzene	ug/L	20	23.2	116	37-151	
Bromodichloromethane	ug/L	20	20.8	104	35-155	
Bromoform	ug/L	20	19.6	98	45-169	
Bromomethane	ug/L	20	14.1	70	1-242	
Carbon tetrachloride	ug/L	20	19.9	100	70-140	
Chlorobenzene	ug/L	20	20.6	103	37-160	
Chloroethane	ug/L	20	23.6	118	14-230	
Chloroform	ug/L	20	21.9	109	51-138	
Chloromethane	ug/L	20	16.7	84	1-273	
cis-1,3-Dichloropropene	ug/L	20	21.4	107	1-227	
Dibromochloromethane	ug/L	20	19.8	99	53-149	
Ethylbenzene	ug/L	20	21.0	105	37-162	
Methylene Chloride	ug/L	20	22.4	112	1-221	
Tetrachloroethene	ug/L	20	21.1	105	64-148	
Toluene	ug/L	20	21.0	105	47-150	
trans-1,2-Dichloroethene	ug/L	20	22.0	110	54-156	
trans-1,3-Dichloropropene	ug/L	20	21.0	105	17-183	
Trichloroethene	ug/L	20	23.0	115	71-157	
Vinyl chloride	ug/L	20	22.5	112	1-251	
1,2-Dichloroethane-d4 (S)	%			107	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE SAMPLE: 1202424

Parameter	Units	92201352002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	50	55.3	111	46-171	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	51.9	104	73-159	
1,1,2-Trichloroethane	ug/L	ND	50	51.8	104	64-152	
1,1-Dichloroethane	ug/L	ND	50	52.3	105	43-172	
1,1-Dichloroethene	ug/L	ND	50	56.8	114	48-189	
1,2-Dichlorobenzene	ug/L	ND	50	51.9	104	54-154	
1,2-Dichloroethane	ug/L	ND	50	53.3	107	42-171	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

LABORATORY CONTROL SAMPLE: 1202237

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	20	21.7	109	46-157	
1,1,2-Trichloroethane	ug/L	20	22.0	110	52-150	
1,1-Dichloroethane	ug/L	20	21.1	105	59-155	
1,1-Dichloroethene	ug/L	20	21.4	107	1-234	
1,2-Dichlorobenzene	ug/L	20	22.2	111	18-190	
1,2-Dichloroethane	ug/L	20	21.9	110	49-155	
1,2-Dichloropropane	ug/L	20	21.4	107	1-210	
1,3-Dichlorobenzene	ug/L	20	21.2	106	59-156	
1,4-Dichlorobenzene	ug/L	20	21.8	109	18-190	
2-Chloroethylvinyl ether	ug/L	40	40.1	100	1-305	
Acrolein	ug/L	100	91.3	91	15-152	
Acrylonitrile	ug/L	100	107	107	75-132	
Benzene	ug/L	20	23.2	116	37-151	
Bromodichloromethane	ug/L	20	20.8	104	35-155	
Bromoform	ug/L	20	19.6	98	45-169	
Bromomethane	ug/L	20	14.1	70	1-242	
Carbon tetrachloride	ug/L	20	19.9	100	70-140	
Chlorobenzene	ug/L	20	20.6	103	37-160	
Chloroethane	ug/L	20	23.6	118	14-230	
Chloroform	ug/L	20	21.9	109	51-138	
Chloromethane	ug/L	20	16.7	84	1-273	
cis-1,3-Dichloropropene	ug/L	20	21.4	107	1-227	
Dibromochloromethane	ug/L	20	19.8	99	53-149	
Ethylbenzene	ug/L	20	21.0	105	37-162	
Methylene Chloride	ug/L	20	22.4	112	1-221	
Tetrachloroethene	ug/L	20	21.1	105	64-148	
Toluene	ug/L	20	21.0	105	47-150	
trans-1,2-Dichloroethene	ug/L	20	22.0	110	54-156	
trans-1,3-Dichloropropene	ug/L	20	21.0	105	17-183	
Trichloroethene	ug/L	20	23.0	115	71-157	
Vinyl chloride	ug/L	20	22.5	112	1-251	
1,2-Dichloroethane-d4 (S)	%			107	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE SAMPLE: 1202424

Parameter	Units	92201352002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	50	55.3	111	46-171	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	51.9	104	73-159	
1,1,2-Trichloroethane	ug/L	ND	50	51.8	104	64-152	
1,1-Dichloroethane	ug/L	ND	50	52.3	105	43-172	
1,1-Dichloroethene	ug/L	ND	50	56.8	114	48-189	
1,2-Dichlorobenzene	ug/L	ND	50	51.9	104	54-154	
1,2-Dichloroethane	ug/L	ND	50	53.3	107	42-171	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

MATRIX SPIKE SAMPLE: 1202424		92201352002	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
1,2-Dichloropropane	ug/L	ND	50	52.5	105	55-157	
1,3-Dichlorobenzene	ug/L	ND	50	50.8	102	57-148	
1,4-Dichlorobenzene	ug/L	ND	50	51.9	104	58-149	
2-Chloroethylvinyl ether	ug/L	ND	100	ND	0	70-130	MO
Acrolein	ug/L	ND	250	248	99	70-130	
Acrylonitrile	ug/L	ND	250	270	108	70-130	
Benzene	ug/L	ND	50	57.1	114	54-163	
Bromodichloromethane	ug/L	ND	50	51.4	103	56-152	
Bromoform	ug/L	ND	50	50.6	101	53-151	
Bromomethane	ug/L	ND	50	58.7	117	10-200	
Carbon tetrachloride	ug/L	ND	50	54.5	109	41-175	
Chlorobenzene	ug/L	ND	50	50.0	100	67-152	
Chloroethane	ug/L	ND	50	45.5	91	23-200	
Chloroform	ug/L	ND	50	53.5	107	51-166	
Chloromethane	ug/L	ND	50	47.1	94	40-175	
cis-1,3-Dichloropropene	ug/L	ND	50	53.5	107	38-146	
Dibromochloromethane	ug/L	ND	50	50.2	100	65-144	
Ethylbenzene	ug/L	ND	50	49.7	99	57-152	
Methylene Chloride	ug/L	ND	50	47.4	94	40-167	
Tetrachloroethene	ug/L	ND	50	54.9	110	59-155	
Toluene	ug/L	ND	50	51.6	103	47-162	
trans-1,2-Dichloroethene	ug/L	ND	50	54.9	110	47-178	
trans-1,3-Dichloropropene	ug/L	ND	50	51.7	103	39-148	
Trichloroethene	ug/L	ND	50	56.9	114	60-153	
Vinyl chloride	ug/L	ND	50	64.2	128	46-176	
1,2-Dichloroethane-d4 (S)	%				102	70-130	
4-Bromofluorobenzene (S)	%				93	70-130	
Toluene-d8 (S)	%				100	70-130	

SAMPLE DUPLICATE: 1202425

Parameter	Units	92201354002	Dup	RPD	Max	
		Result	Result		RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropane	ug/L	ND	ND		30	
1,3-Dichlorobenzene	ug/L	ND	ND		30	
1,4-Dichlorobenzene	ug/L	ND	ND		30	
2-Chloroethylvinyl ether	ug/L	ND	ND		30	
Acrolein	ug/L	ND	ND		30	
Acrylonitrile	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

SAMPLE DUPLICATE: 1202425

Parameter	Units	92201354002 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	ND		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	ND		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Methylene Chloride	ug/L	ND	ND		30	
Tetrachloroethene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	104	102	2		
4-Bromofluorobenzene (S)	%	88	88	0		
Toluene-d8 (S)	%	98	97	0		

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

SAMPLE DUPLICATE: 1202425

Parameter	Units	92201354002 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	ND		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	ND		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Methylene Chloride	ug/L	ND	ND		30	
Tetrachloroethene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	104	102	2		
4-Bromofluorobenzene (S)	%	88	88	0		
Toluene-d8 (S)	%	98	97	0		

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

QC Batch:	OEXT/27846	Analysis Method:	EPA 625
QC Batch Method:	EPA 625	Analysis Description:	625 MSS
Associated Lab Samples:	92201665001		

METHOD BLANK:	1204687	Matrix:	Water
Associated Lab Samples:	92201665001		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	5.0	05/27/14 20:33	
1,2-Dichlorobenzene	ug/L	ND	5.0	05/27/14 20:33	
1,2-Diphenylhydrazine	ug/L	ND	5.0	05/27/14 20:33	
1,3-Dichlorobenzene	ug/L	ND	5.0	05/27/14 20:33	
1,4-Dichlorobenzene	ug/L	ND	5.0	05/27/14 20:33	
2,4,6-Trichlorophenol	ug/L	ND	10.0	05/27/14 20:33	
2,4-Dichlorophenol	ug/L	ND	5.0	05/27/14 20:33	
2,4-Dimethylphenol	ug/L	ND	10.0	05/27/14 20:33	
2,4-Dinitrophenol	ug/L	ND	50.0	05/27/14 20:33	
2,4-Dinitrotoluene	ug/L	ND	5.0	05/27/14 20:33	
2,6-Dinitrotoluene	ug/L	ND	5.0	05/27/14 20:33	
2-Chloronaphthalene	ug/L	ND	5.0	05/27/14 20:33	
2-Chlorophenol	ug/L	ND	5.0	05/27/14 20:33	
2-Nitrophenol	ug/L	ND	5.0	05/27/14 20:33	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	10.0	05/27/14 20:33	
3,3'-Dichlorobenzidine	ug/L	ND	25.0	05/27/14 20:33	
4,6-Dinitro-2-methylphenol	ug/L	ND	20.0	05/27/14 20:33	
4-Bromophenylphenyl ether	ug/L	ND	5.0	05/27/14 20:33	
4-Chlorophenylphenyl ether	ug/L	ND	5.0	05/27/14 20:33	
4-Nitrophenol	ug/L	ND	50.0	05/27/14 20:33	
Acenaphthene	ug/L	ND	5.0	05/27/14 20:33	
Acenaphthylene	ug/L	ND	5.0	05/27/14 20:33	
Anthracene	ug/L	ND	5.0	05/27/14 20:33	
Benidine	ug/L	ND	50.0	05/27/14 20:33	
Benzo(a)anthracene	ug/L	ND	5.0	05/27/14 20:33	
Benzo(a)pyrene	ug/L	ND	5.0	05/27/14 20:33	
Benzo(b)fluoranthene	ug/L	ND	5.0	05/27/14 20:33	
Benzo(g,h,i)perylene	ug/L	ND	5.0	05/27/14 20:33	
Benzo(k)fluoranthene	ug/L	ND	5.0	05/27/14 20:33	
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	05/27/14 20:33	
bis(2-Chloroethyl) ether	ug/L	ND	5.0	05/27/14 20:33	
bis(2-Chloroisopropyl) ether	ug/L	ND	5.0	05/27/14 20:33	
bis(2-Ethylhexyl)phthalate	ug/L	ND	5.0	05/27/14 20:33	
Butylbenzylphthalate	ug/L	ND	5.0	05/27/14 20:33	
Chrysene	ug/L	ND	5.0	05/27/14 20:33	
Di-n-butylphthalate	ug/L	ND	5.0	05/27/14 20:33	
Di-n-octylphthalate	ug/L	ND	5.0	05/27/14 20:33	
Dibenz(a,h)anthracene	ug/L	ND	5.0	05/27/14 20:33	
Diethylphthalate	ug/L	ND	5.0	05/27/14 20:33	
Dimethylphthalate	ug/L	ND	5.0	05/27/14 20:33	
Fluoranthene	ug/L	ND	5.0	05/27/14 20:33	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

METHOD BLANK: 1204687

Matrix: Water

Associated Lab Samples: 92201665001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Fluorene	ug/L	ND	5.0	05/27/14 20:33	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	05/27/14 20:33	
Hexachlorobenzene	ug/L	ND	5.0	05/27/14 20:33	
Hexachlorocyclopentadiene	ug/L	ND	10.0	05/27/14 20:33	
Hexachloroethane	ug/L	ND	5.0	05/27/14 20:33	
Indeno(1,2,3-cd)pyrene	ug/L	ND	5.0	05/27/14 20:33	
Isophorone	ug/L	ND	10.0	05/27/14 20:33	
N-Nitroso-di-n-propylamine	ug/L	ND	5.0	05/27/14 20:33	
N-Nitrosodimethylamine	ug/L	ND	5.0	05/27/14 20:33	
N-Nitrosodiphenylamine	ug/L	ND	10.0	05/27/14 20:33	
Naphthalene	ug/L	ND	5.0	05/27/14 20:33	
Nitrobenzene	ug/L	ND	5.0	05/27/14 20:33	
Pentachlorophenol	ug/L	ND	10.0	05/27/14 20:33	
Phenanthrene	ug/L	ND	5.0	05/27/14 20:33	
Phenol	ug/L	ND	5.0	05/27/14 20:33	
Pyrene	ug/L	ND	5.0	05/27/14 20:33	
2,4,6-Tribromophenol (S)	%	60	10-137	05/27/14 20:33	
2-Fluorobiphenyl (S)	%	44	15-120	05/27/14 20:33	
2-Fluorophenol (S)	%	24	10-120	05/27/14 20:33	
Nitrobenzene-d5 (S)	%	51	10-120	05/27/14 20:33	
Phenol-d6 (S)	%	15	10-120	05/27/14 20:33	
Terphenyl-d14 (S)	%	84	11-131	05/27/14 20:33	

LABORATORY CONTROL SAMPLE: 1204688

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	35.7	71	44-142	
1,2-Dichlorobenzene	ug/L	50	32.4	65	32-129	
1,2-Diphenylhydrazine	ug/L	50	33.4	67	25-150	
1,3-Dichlorobenzene	ug/L	50	32.1	64	1-172	
1,4-Dichlorobenzene	ug/L	50	33.4	67	20-124	
2,4,6-Trichlorophenol	ug/L	50	39.4	79	37-144	
2,4-Dichlorophenol	ug/L	50	38.5	77	1-191	
2,4-Dimethylphenol	ug/L	50	34.4	69	32-119	
2,4-Dinitrophenol	ug/L	250	233	93	1-181	
2,4-Dinitrotoluene	ug/L	50	52.9	106	39-139	
2,6-Dinitrotoluene	ug/L	50	50.5	101	50-158	
2-Chloronaphthalene	ug/L	50	35.2	70	60-118	
2-Chlorophenol	ug/L	50	31.0	62	23-134	
2-Nitrophenol	ug/L	50	44.3	89	29-182	
3&4-Methylphenol(m&p Cresol)	ug/L	50	25.0	50	25-150	
3,3'-Dichlorobenzidine	ug/L	100	77.1	77	1-262	
4,6-Dinitro-2-methylphenol	ug/L	100	96.7	97	1-181	
4-Bromophenylphenyl ether	ug/L	50	40.0	80	53-127	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

METHOD BLANK: 1204687 Matrix: Water
Associated Lab Samples: 92201665001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Fluorene	ug/L	ND	5.0	05/27/14 20:33	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	05/27/14 20:33	
Hexachlorobenzene	ug/L	ND	5.0	05/27/14 20:33	
Hexachlorocyclopentadiene	ug/L	ND	10.0	05/27/14 20:33	
Hexachloroethane	ug/L	ND	5.0	05/27/14 20:33	
Indeno(1,2,3-cd)pyrene	ug/L	ND	5.0	05/27/14 20:33	
Isophorone	ug/L	ND	10.0	05/27/14 20:33	
N-Nitroso-di-n-propylamine	ug/L	ND	5.0	05/27/14 20:33	
N-Nitrosodimethylamine	ug/L	ND	5.0	05/27/14 20:33	
N-Nitrosodiphenylamine	ug/L	ND	10.0	05/27/14 20:33	
Naphthalene	ug/L	ND	5.0	05/27/14 20:33	
Nitrobenzene	ug/L	ND	5.0	05/27/14 20:33	
Pentachlorophenol	ug/L	ND	10.0	05/27/14 20:33	
Phenanthrene	ug/L	ND	5.0	05/27/14 20:33	
Phenol	ug/L	ND	5.0	05/27/14 20:33	
Pyrene	ug/L	ND	5.0	05/27/14 20:33	
2,4,6-Tribromophenol (S)	%	60	10-137	05/27/14 20:33	
2-Fluorobiphenyl (S)	%	44	15-120	05/27/14 20:33	
2-Fluorophenol (S)	%	24	10-120	05/27/14 20:33	
Nitrobenzene-d5 (S)	%	51	10-120	05/27/14 20:33	
Phenol-d6 (S)	%	15	10-120	05/27/14 20:33	
Terphenyl-d14 (S)	%	84	11-131	05/27/14 20:33	

LABORATORY CONTROL SAMPLE: 1204688

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	35.7	71	44-142	
1,2-Dichlorobenzene	ug/L	50	32.4	65	32-129	
1,2-Diphenylhydrazine	ug/L	50	33.4	67	25-150	
1,3-Dichlorobenzene	ug/L	50	32.1	64	1-172	
1,4-Dichlorobenzene	ug/L	50	33.4	67	20-124	
2,4,6-Trichlorophenol	ug/L	50	39.4	79	37-144	
2,4-Dichlorophenol	ug/L	50	38.5	77	1-191	
2,4-Dimethylphenol	ug/L	50	34.4	69	32-119	
2,4-Dinitrophenol	ug/L	250	233	93	1-181	
2,4-Dinitrotoluene	ug/L	50	52.9	106	39-139	
2,6-Dinitrotoluene	ug/L	50	50.5	101	50-158	
2-Chloronaphthalene	ug/L	50	35.2	70	60-118	
2-Chlorophenol	ug/L	50	31.0	62	23-134	
2-Nitrophenol	ug/L	50	44.3	89	29-182	
3&4-Methylphenol(m&p Cresol)	ug/L	50	25.0	50	25-150	
3,3'-Dichlorobenzidine	ug/L	100	77.1	77	1-262	
4,6-Dinitro-2-methylphenol	ug/L	100	96.7	97	1-181	
4-Bromophenylphenyl ether	ug/L	50	40.0	80	53-127	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

LABORATORY CONTROL SAMPLE: 1204688

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Chlorophenylphenyl ether	ug/L	50	40.2	80	25-158	
4-Nitrophenol	ug/L	250	121	49	1-132	
Acenaphthene	ug/L	50	35.5	71	47-145	
Acenaphthylene	ug/L	50	34.7	69	33-145	
Anthracene	ug/L	50	41.9	84	1-166	
Benzidine	ug/L	100	30.3J	30	25-150	
Benzo(a)anthracene	ug/L	50	39.8	80	33-143	
Benzo(a)pyrene	ug/L	50	40.8	82	17-163	
Benzo(b)fluoranthene	ug/L	50	40.9	82	24-159	
Benzo(g,h,i)perylene	ug/L	50	30.9	62	1-219	
Benzo(k)fluoranthene	ug/L	50	38.4	77	11-162	
bis(2-Chloroethoxy)methane	ug/L	50	38.2	76	33-184	
bis(2-Chloroethyl) ether	ug/L	50	35.4	71	12-158	
bis(2-Chloroisopropyl) ether	ug/L	50	36.0	72	36-166	
bis(2-Ethylhexyl)phthalate	ug/L	50	41.2	82	8-158	
Butylbenzylphthalate	ug/L	50	42.5	85	1-152	
Chrysene	ug/L	50	39.7	79	17-168	
Di-n-butylphthalate	ug/L	50	38.3	77	1-118	
Di-n-octylphthalate	ug/L	50	40.4	81	4-146	
Dibenz(a,h)anthracene	ug/L	50	32.2	64	1-227	
Diethylphthalate	ug/L	50	38.2	76	1-114	
Dimethylphthalate	ug/L	50	40.8	82	1-112	
Fluoranthene	ug/L	50	45.1	90	26-137	
Fluorene	ug/L	50	40.6	81	59-121	
Hexachloro-1,3-butadiene	ug/L	50	36.8	74	24-116	
Hexachlorobenzene	ug/L	50	40.3	81	1-152	
Hexachlorocyclopentadiene	ug/L	50	31.7	63	25-150	
Hexachloroethane	ug/L	50	35.4	71	40-113	
Indeno(1,2,3-cd)pyrene	ug/L	50	25.8	52	1-171	
Isophorone	ug/L	50	49.4	99	21-196	
N-Nitroso-di-n-propylamine	ug/L	50	34.2	68	1-230	
N-Nitrosodimethylamine	ug/L	50	21.6	43	25-150	
N-Nitrosodiphenylamine	ug/L	50	32.6	65	25-150	
Naphthalene	ug/L	50	32.2	64	21-133	
Nitrobenzene	ug/L	50	50.6	101	35-180	
Pentachlorophenol	ug/L	100	77.2	77	14-176	
Phenanthrene	ug/L	50	41.0	82	54-120	
Phenol	ug/L	50	16.0	32	5-112	
Pyrene	ug/L	50	41.4	83	52-115	
2,4,6-Tribromophenol (S)	%			100	10-137	
2-Fluorobiphenyl (S)	%			74	15-120	
2-Fluorophenol (S)	%			41	10-120	
Nitrobenzene-d5 (S)	%			93	10-120	
Phenol-d6 (S)	%			28	10-120	
Terphenyl-d14 (S)	%			90	11-131	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1204689 1204690												
Parameter	Units	92201745002		MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual
		Result	Conc.	Spike	Spike	Result	Result	% Rec	% Rec	Limits	RPD	
1,2,4-Trichlorobenzene	ug/L	ND	100	100	100	51.9	37.5	52	38	44-142	32	M0,R1
1,2-Dichlorobenzene	ug/L	ND	100	100	100	47.3	34.9	47	35	32-129	30	IO
1,2-Diphenylhydrazine	ug/L	ND	100	100	100	62.4	50.7	62	51	25-150	21	30
1,3-Dichlorobenzene	ug/L	ND	100	100	100	46.0	35.2	46	35	1-172	26	IO
1,4-Dichlorobenzene	ug/L	ND	100	100	100	49.2	37.0	49	37	20-124	28	IO
2,4,6-Trichlorophenol	ug/L	ND	100	100	100	66.2	53.2	66	53	37-144	22	30
2,4-Dichlorophenol	ug/L	ND	100	100	100	48.8	35.3	49	35	1-191	32	R1
2,4-Dimethylphenol	ug/L	ND	100	100	100	44.5	29.9	44	30	32-119	39	M0,R1
2,4-Dinitrophenol	ug/L	ND	500	500	500	221	238	44	48	1-181	7	30
2,4-Dinitrotoluene	ug/L	ND	100	100	100	82.6	78.9	83	79	39-139	5	30
2,6-Dinitrotoluene	ug/L	ND	100	100	100	84.9	72.0	85	72	50-158	16	30
2-Chloronaphthalene	ug/L	ND	100	100	100	55.9	40.6	56	41	60-118	32	M0,R1
2-Chlorophenol	ug/L	ND	100	100	100	43.2	32.2	43	32	23-134	29	IO
2-Nitrophenol	ug/L	ND	100	100	100	61.4	43.6	61	44	29-182	34	R1
3&4-Methylphenol(m&p Cresol)	ug/L	ND	100	100	100	34.8	25.8	35	26	25-150	30	IO
3,3'-Dichlorobenzidine	ug/L	ND	200	200	200	73.8	70.0	37	35	1-262	5	30
4,6-Dinitro-2-methylphenol	ug/L	ND	200	200	200	120	120	60	60	1-181	1	30
4-Bromophenylphenyl ether	ug/L	ND	100	100	100	72.2	61.0	72	61	53-127	17	30
4-Chlorophenylphenyl ether	ug/L	ND	100	100	100	60.8	51.3	61	51	25-158	17	30
4-Nitrophenol	ug/L	ND	500	500	500	210	234	42	47	1-132	11	30
Acenaphthene	ug/L	ND	100	100	100	51.5	39.5	51	40	47-145	26	M0
Acenaphthylene	ug/L	ND	100	100	100	53.2	40.7	53	41	33-145	27	30
Anthracene	ug/L	ND	100	100	100	74.8	68.2	75	68	1-166	9	30
Benzidine	ug/L	ND	200	200	200	ND	ND	0	0	25-150		M0
Benzo(a)anthracene	ug/L	ND	100	100	100	67.7	66.9	68	67	33-143	1	30
Benzo(a)pyrene	ug/L	ND	100	100	100	65.3	66.7	65	67	17-163	2	30
Benzo(b)fluoranthene	ug/L	ND	100	100	100	67.5	68.7	68	69	24-159	2	30
Benzo(g,h,i)perylene	ug/L	ND	100	100	100	47.1	50.6	47	51	1-219	7	30
Benzo(k)fluoranthene	ug/L	ND	100	100	100	63.1	64.3	63	64	11-162	2	30
bis(2-Chloroethoxy)methane	ug/L	ND	100	100	100	50.9	34.6	51	35	33-184	38	R1
bis(2-Chloroethyl) ether	ug/L	ND	100	100	100	50.0	37.3	50	37	12-158	29	IO
bis(2-Chloroisopropyl) ether	ug/L	ND	100	100	100	44.9	31.7	45	32	36-166	34	IO, M0, R1
bis(2-Ethylhexyl)phthalate	ug/L	ND	100	100	100	77.6	72.3	78	72	8-158	7	30
Butylbenzylphthalate	ug/L	ND	100	100	100	81.6	72.8	82	73	1-152	11	30
Chrysene	ug/L	ND	100	100	100	70.7	70.0	71	70	17-168	1	30
Di-n-butylphthalate	ug/L	ND	100	100	100	66.9	63.0	67	63	1-118	6	30
Di-n-octylphthalate	ug/L	ND	100	100	100	69.3	71.4	69	71	4-146	3	30
Dibenz(a,h)anthracene	ug/L	ND	100	100	100	50.5	51.5	51	51	1-227	2	30
Diethylphthalate	ug/L	ND	100	100	100	60.5	56.4	61	56	1-114	7	30
Dimethylphthalate	ug/L	ND	100	100	100	68.8	58.4	69	58	1-112	16	30
Fluoranthene	ug/L	ND	100	100	100	72.2	76.1	72	76	26-137	5	30
Fluorene	ug/L	ND	100	100	100	61.3	53.7	61	54	59-121	13	M0
Hexachloro-1,3-butadiene	ug/L	ND	100	100	100	54.7	38.0	55	38	24-116	36	R1
Hexachlorobenzene	ug/L	ND	100	100	100	70.8	61.9	71	62	1-152	13	30

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REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1204689 1204690												
Parameter	Units	92201745002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
1,2,4-Trichlorobenzene	ug/L	ND	100	100	51.9	37.5	52	38	44-142	32	30	M0,R1
1,2-Dichlorobenzene	ug/L	ND	100	100	47.3	34.9	47	35	32-129	30	30	IO
1,2-Diphenylhydrazine	ug/L	ND	100	100	62.4	50.7	62	51	25-150	21	30	
1,3-Dichlorobenzene	ug/L	ND	100	100	46.0	35.2	46	35	1-172	26	30	IO
1,4-Dichlorobenzene	ug/L	ND	100	100	49.2	37.0	49	37	20-124	28	30	IO
2,4,6-Trichlorophenol	ug/L	ND	100	100	66.2	53.2	66	53	37-144	22	30	
2,4-Dichlorophenol	ug/L	ND	100	100	48.8	35.3	49	35	1-191	32	30	R1
2,4-Dimethylphenol	ug/L	ND	100	100	44.5	29.9	44	30	32-119	39	30	M0,R1
2,4-Dinitrophenol	ug/L	ND	500	500	221	238	44	48	1-181	7	30	
2,4-Dinitrotoluene	ug/L	ND	100	100	82.6	78.9	83	79	39-139	5	30	
2,6-Dinitrotoluene	ug/L	ND	100	100	84.9	72.0	85	72	50-158	16	30	
2-Chloronaphthalene	ug/L	ND	100	100	55.9	40.6	56	41	60-118	32	30	M0,R1
2-Chlorophenol	ug/L	ND	100	100	43.2	32.2	43	32	23-134	29	30	IO
2-Nitrophenol	ug/L	ND	100	100	61.4	43.6	61	44	29-182	34	30	R1
3&4-Methylphenol(m&p Cresol)	ug/L	ND	100	100	34.8	25.8	35	26	25-150	30	30	IO
3,3'-Dichlorobenzidine	ug/L	ND	200	200	73.8	70.0	37	35	1-262	5	30	
4,6-Dinitro-2-methylphenol	ug/L	ND	200	200	120	120	60	60	1-181	1	30	
4-Bromophenylphenyl ether	ug/L	ND	100	100	72.2	61.0	72	61	53-127	17	30	
4-Chlorophenylphenyl ether	ug/L	ND	100	100	60.8	51.3	61	51	25-158	17	30	
4-Nitrophenol	ug/L	ND	500	500	210	234	42	47	1-132	11	30	
Acenaphthene	ug/L	ND	100	100	51.5	39.5	51	40	47-145	26	30	M0
Acenaphthylene	ug/L	ND	100	100	53.2	40.7	53	41	33-145	27	30	
Anthracene	ug/L	ND	100	100	74.8	68.2	75	68	1-166	9	30	
Benzydine	ug/L	ND	200	200	ND	ND	0	0	25-150		30	M0
Benzo(a)anthracene	ug/L	ND	100	100	67.7	66.9	68	67	33-143	1	30	
Benzo(a)pyrene	ug/L	ND	100	100	65.3	66.7	65	67	17-163	2	30	
Benzo(b)fluoranthene	ug/L	ND	100	100	67.5	68.7	68	69	24-159	2	30	
Benzo(g,h,i)perylene	ug/L	ND	100	100	47.1	50.6	47	51	1-219	7	30	
Benzo(k)fluoranthene	ug/L	ND	100	100	63.1	64.3	63	64	11-162	2	30	
bis(2-Chloroethoxy)methane	ug/L	ND	100	100	50.9	34.6	51	35	33-184	38	30	R1
bis(2-Chloroethyl) ether	ug/L	ND	100	100	50.0	37.3	50	37	12-158	29	30	IO
bis(2-Chloroisopropyl) ether	ug/L	ND	100	100	44.9	31.7	45	32	36-166	34	30	IO,M0, R1
bis(2-Ethylhexyl)phthalate	ug/L	ND	100	100	77.6	72.3	78	72	8-158	7	30	
Butylbenzylphthalate	ug/L	ND	100	100	81.6	72.8	82	73	1-152	11	30	
Chrysene	ug/L	ND	100	100	70.7	70.0	71	70	17-168	1	30	
Di-n-butylphthalate	ug/L	ND	100	100	66.9	63.0	67	63	1-118	6	30	
Di-n-octylphthalate	ug/L	ND	100	100	69.3	71.4	69	71	4-146	3	30	
Dibenz(a,h)anthracene	ug/L	ND	100	100	50.5	51.5	51	51	1-227	2	30	
Diethylphthalate	ug/L	ND	100	100	60.5	56.4	61	56	1-114	7	30	
Dimethylphthalate	ug/L	ND	100	100	68.8	58.4	69	58	1-112	16	30	
Fluoranthene	ug/L	ND	100	100	72.2	76.1	72	76	26-137	5	30	
Fluorene	ug/L	ND	100	100	61.3	53.7	61	54	59-121	13	30	M0
Hexachloro-1,3-butadiene	ug/L	ND	100	100	54.7	38.0	55	38	24-116	36	30	R1
Hexachlorobenzene	ug/L	ND	100	100	70.8	61.9	71	62	1-152	13	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1204689 1204690												
Parameter	Units	92201745002	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	Qual
		Result	Spike	Spike								
			Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	
Hexachlorocyclopentadiene	ug/L	ND	100	100	55.4	36.0	55	36	25-150	42	30	R1
Hexachloroethane	ug/L	ND	100	100	50.7	38.1	51	38	40-113	28	30	IO,M0
Indeno(1,2,3-cd)pyrene	ug/L	ND	100	100	39.0	40.8	39	41	1-171	4	30	
Isophorone	ug/L	ND	100	100	60.0	42.3	60	42	21-196	35	30	R1
N-Nitroso-di-n-propylamine	ug/L	ND	100	100	38.7	30.9	39	31	1-230	22	30	IO
N-Nitrosodimethylamine	ug/L	ND	100	100	39.6	30.3	40	30	25-150	27	30	IO
N-Nitrosodiphenylamine	ug/L	ND	100	100	61.2	53.3	61	53	25-150	14	30	
Naphthalene	ug/L	ND	100	100	46.5	33.7	46	34	21-133	32	30	R1
Nitrobenzene	ug/L	ND	100	100	71.7	53.3	72	53	35-180	29	30	
Pentachlorophenol	ug/L	ND	200	200	105	115	53	57	14-176	9	30	
Phenanthrene	ug/L	ND	100	100	73.5	66.8	74	67	54-120	10	30	
Phenol	ug/L	ND	100	100	31.0	21.1	31	21	5-112	38	30	IO,R1
Pyrene	ug/L	ND	100	100	84.6	69.7	85	70	52-115	19	30	
2,4,6-Tribromophenol (S)	%						79	75	10-137			
2-Fluorobiphenyl (S)	%						57	40	15-120			
2-Fluorophenol (S)	%						36	24	10-120			IO
Nitrobenzene-d5 (S)	%						64	47	10-120			
Phenol-d6 (S)	%						27	18	10-120			IO
Terphenyl-d14 (S)	%						85	72	11-131			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

QC Batch: WETA/19194 Analysis Method: EPA 420.4
QC Batch Method: EPA 420.4 Analysis Description: 420.4 Phenolics
Associated Lab Samples: 92201665001

METHOD BLANK: 1212713 Matrix: Water
Associated Lab Samples: 92201665001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenol	mg/L	ND	0.0050	06/03/14 20:51	

LABORATORY CONTROL SAMPLE: 1212714

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenol	mg/L	.05	0.051	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1212715 1212716

Parameter	Units	92201123002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Phenol	mg/L	0.014	.05	.05	0.070	0.061	114	94	90-110	15 20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1212717 1212718

Parameter	Units	92201642001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Phenol	mg/L	0.011	.05	.05	0.053	0.068	85	115	90-110	25 20	M1,R1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

QC Batch: WETA/19194 Analysis Method: EPA 420.4
QC Batch Method: EPA 420.4 Analysis Description: 420.4 Phenolics
Associated Lab Samples: 92201665001

METHOD BLANK: 1212713 Matrix: Water
Associated Lab Samples: 92201665001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenol	mg/L	ND	0.0050	06/03/14 20:51	

LABORATORY CONTROL SAMPLE: 1212714

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenol	mg/L	.05	0.051	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1212715 1212716

Parameter	Units	92201123002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phenol	mg/L	0.014	.05	.05	0.070	0.061	114	94	90-110	15	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1212717 1212718

Parameter	Units	92201642001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phenol	mg/L	0.011	.05	.05	0.053	0.068	85	115	90-110	25	20	M1,R1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Date: 06/13/2014 03:24 PM

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Page 20 of 25

QUALITY CONTROL DATA

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

QC Batch:	WETA/19112	Analysis Method:	SM 4500-CN-E
QC Batch Method:	SM 4500-CN-E	Analysis Description:	4500CNE Cyanide, Total
Associated Lab Samples:	92201665001		

METHOD BLANK: 1206818 Matrix: Water
Associated Lab Samples: 92201665001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	05/27/14 14:56	

LABORATORY CONTROL SAMPLE: 1206819

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.11	112	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1206820 1206821

Parameter	Units	92201545002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Cyanide	mg/L	0.12	.1	.1	0.20	0.20	84	77	75-125	3 20	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Acid preservation may not be appropriate for 2-Chloroethylvinyl ether, Styrene, and Vinyl chloride.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-C Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

IO The internal standard response was outside the laboratory acceptance limits confirmed by reanalysis. The results reported are from the most QC compliant analysis.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: EXPANDED EFFLEUNT TESTING
Pace Project No.: 92201665

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M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS




QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92201665

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92201665001	EFFLUENT	EPA 200.7	MPRP/15999	EPA 200.7	ICP/14473
92201665001	EFFLUENT	EPA 245.1	MERP/6626	EPA 245.1	MERC/6387
92201665001	EFFLUENT	EPA 625	OEXT/27846	EPA 625	MSSV/9169
92201665001	EFFLUENT	EPA 624	MSV/26872		
92201665001	EFFLUENT	EPA 420.4	WETA/19194		
92201665001	EFFLUENT	SM 4500-CN-E	WETA/19112		

REPORT OF LABORATORY ANALYSIS

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	Document Name:	Document Revised: April 07, 2014
	Sample Condition Upon Receipt (SCUR)	Page 1 of 2
	Document Number: F-CHR-CS-003-rev.14	Issuing Authority: Pace Huntersville Quality Office

Client Name: Town of Purrellville

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used: IR Gun T1102 T1401 Type of Ice: ☒ Yes ☐ Blue ☐ None ☒ Samples on ice, cooling process has begun

Temp Correction Factor T1102: No Correction T1301: No Correction

Corrected Cooler Temp.: 2.6 °C Biological Tissue is Frozen: Yes No ☒ N/A

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: EDS/1/6/14

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Samples checked for dechlorination:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15. All vials
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

SCURF Review:	<u>MD</u>	Date:	<u>5-16-14</u>
SRF Review:	<u>MD</u>	Date:	<u>5-16-14</u>


Place label here

WO#: 92201665



92201665

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

	Document Name:	Document Revised: April 07, 2014
	Sample Condition Upon Receipt (SCUR)	Page 1 of 2
	Document Number: F-CHR-CS-003-rev.14	Issuing Authority: Pace Huntersville Quality Office

Client Name: Town of Purrellville

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used: IR Gun T1102 T1401 Type of Ice: ☒ Wet ☐ Blue ☐ None ☒ Samples on ice, cooling process has begun

Temp Correction Factor T1102: No Correction T1301: No Correction

Corrected Cooler Temp.: 2.6 °C

Biological Tissue is Frozen: Yes No ☒ N/A

Date and Initials of person examining contents: EDS/11/6/14

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, W-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15. All vials
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

SCURF Review:	<u>MD</u>	Date:	<u>5-16-14</u>
SRF Review:	<u>MD</u>	Date:	<u>5-16-14</u>

Place label here

WO#: 92201665



Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



ATTACHMENT E-2

Pace Analytical Services, Inc.
9800 Kinsey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

June 18, 2014

Ms. Susan Davis
Town of Purcellville
1001 South 20th St.
Purcellville, VA 20132

RE: Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

Dear Ms. Davis:

Enclosed are the analytical results for sample(s) received by the laboratory on June 04, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tabitha M Dacal
tabitha.dacal@pacelabs.com
Project Manager

Enclosures

cc: Jenny Austin, Town of Purcellville



REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
9800 Kinney Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

Charlotte Certification IDs

9800 Kinney Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001

Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
West Virginia Certification #: 357
Virginia/VELAP Certification #: 460221

Asheville Certification IDs

2225 Riverside Dr., Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
West Virginia Certification #: 356
Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: EXPANDED EFFLUENT TESTING

Pace Project No.: 92203930

Charlotte Certification IDs

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001

Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
West Virginia Certification #: 357
Virginia/VELAP Certification #: 460221

Asheville Certification IDs

2225 Riverside Dr., Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
West Virginia Certification #: 356
Virginia/VELAP Certification #: 460222

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Pace Analytical Services, Inc.
9800 Kinsey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92203930001	EFFLUENT COMP	Water	06/03/14 07:30	06/04/14 09:40

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SAMPLE ANALYTE COUNT

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92203930001	EFFLUENT COMP	EPA 200.7	JMW	15	PASI-A
		EPA 245.1	MTS	1	PASI-A
		EPA 625	RES	63	PASI-C
		EPA 624	MCK	35	PASI-C
		EPA 420.4	DMN	1	PASI-A
		SM 4500-CN-E	JDA	1	PASI-A

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SAMPLE ANALYTE COUNT

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92203930001	EFFLUENT COMP	EPA 200.7	JMW	15	PASI-A
		EPA 245.1	MTS	1	PASI-A
		EPA 625	RES	63	PASI-C
		EPA 624	MCK	35	PASI-C
		EPA 420.4	DMN	1	PASI-A
		SM 4500-CN-E	JDA	1	PASI-A

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ANALYTICAL RESULTS

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

Sample: EFFLUENT COMP		Lab ID: 92203930001	Collected: 06/03/14 07:30	Received: 06/04/14 09:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

200.7 MET ICP

Analytical Method: EPA 200.7 Preparation Method: EPA 200.7

Antimony	ND ug/L	5.0	1	06/05/14 17:30	06/06/14 21:41	7440-36-0
Arsenic	ND ug/L	10.0	1	06/05/14 17:30	06/06/14 21:41	7440-38-2
Beryllium	ND ug/L	1.0	1	06/05/14 17:30	06/06/14 21:41	7440-41-7
Cadmium	ND ug/L	1.0	1	06/05/14 17:30	06/06/14 21:41	7440-43-9
Chromium	ND ug/L	5.0	1	06/05/14 17:30	06/06/14 21:41	7440-47-3
Copper	ND ug/L	5.0	1	06/05/14 17:30	06/06/14 21:41	7440-50-8
Hardness, Calcium (SM 2340B)	90900 ug/L	250	1	06/05/14 17:30	06/06/14 21:41	
Hardness, Magnesium (SM 2340B)	45300 ug/L	412	1	06/05/14 17:30	06/06/14 21:41	
Lead	ND ug/L	5.0	1	06/05/14 17:30	06/06/14 21:41	7439-92-1
Nickel	5.4 ug/L	5.0	1	06/05/14 17:30	06/06/14 21:41	7440-02-0
Selenium	ND ug/L	10.0	1	06/05/14 17:30	06/06/14 21:41	7782-49-2
Silver	ND ug/L	5.0	1	06/05/14 17:30	06/06/14 21:41	7440-22-4
Thallium	ND ug/L	10.0	1	06/05/14 17:30	06/06/14 21:41	7440-28-0
Hardness, Total (SM 2340B)	136000 ug/L	662	1	06/05/14 17:30	06/06/14 21:41	
Zinc	32.6 ug/L	10.0	1	06/05/14 17:30	06/06/14 21:41	7440-66-6

245.1 Mercury

Analytical Method: EPA 245.1 Preparation Method: EPA 245.1

Mercury	ND ug/L	0.20	1	06/09/14 19:30	06/10/14 16:37	7439-97-6
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625 MSSV

Analytical Method: EPA 625 Preparation Method: EPA 625

Acenaphthene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	83-32-9
Acenaphthylene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	208-96-8
Anthracene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	120-12-7
Benzidine	ND ug/L	50.0	1	06/13/14 12:25	06/16/14 15:11	92-87-5
Benzo(a)anthracene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	56-55-3
Benzo(a)pyrene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	50-32-8
Benzo(b)fluoranthene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	205-99-2
Benzo(g,h,i)perylene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	191-24-2
Benzo(k)fluoranthene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	207-08-9
4-Bromophenylphenyl ether	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	101-55-3
Butylbenzylphthalate	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	85-68-7
bis(2-Chloroethoxy)methane	ND ug/L	10.0	1	06/13/14 12:25	06/16/14 15:11	111-91-1
bis(2-Chloroethyl) ether	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	111-44-4
bis(2-Chloroisopropyl) ether	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	108-60-1
2-Chloronaphthalene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	91-58-7
2-Chlorophenol	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	95-57-8
4-Chlorophenylphenyl ether	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	7005-72-3
Chrysene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	218-01-9
Dibenz(a,h)anthracene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	53-70-3
1,2-Dichlorobenzene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	95-50-1
1,3-Dichlorobenzene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	541-73-1
1,4-Dichlorobenzene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	106-46-7
3,3'-Dichlorobenzidine	ND ug/L	25.0	1	06/13/14 12:25	06/16/14 15:11	91-94-1
2,4-Dichlorophenol	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	120-83-2
Diethylphthalate	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	84-66-2
2,4-Dimethylphenol	ND ug/L	10.0	1	06/13/14 12:25	06/16/14 15:11	105-67-9

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

Sample: EFFLUENT COMP		Lab ID: 92203930001	Collected: 06/03/14 07:30	Received: 06/04/14 09:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

625 MSSV

Analytical Method: EPA 625 Preparation Method: EPA 625

Dimethylphthalate	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	131-11-3	
Di-n-butylphthalate	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	84-74-2	
4,6-Dinitro-2-methylphenol	ND ug/L	20.0	1	06/13/14 12:25	06/16/14 15:11	534-52-1	
2,4-Dinitrophenol	ND ug/L	50.0	1	06/13/14 12:25	06/16/14 15:11	51-28-5	
2,4-Dinitrotoluene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	121-14-2	
2,6-Dinitrotoluene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	606-20-2	
Di-n-octylphthalate	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	117-84-0	
1,2-Diphenylhydrazine	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	122-66-7	
bis(2-Ethylhexyl)phthalate	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	117-81-7	
Fluoranthene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	206-44-0	
Fluorene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	86-73-7	
Hexachloro-1,3-butadiene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	87-68-3	
Hexachlorobenzene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	118-74-1	
Hexachlorocyclopentadiene	ND ug/L	10.0	1	06/13/14 12:25	06/16/14 15:11	77-47-4	
Hexachloroethane	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	67-72-1	
Indeno(1,2,3-cd)pyrene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	193-39-5	
Isophorone	ND ug/L	10.0	1	06/13/14 12:25	06/16/14 15:11	78-59-1	
3&4-Methylphenol(m&p Cresol)	ND ug/L	10.0	1	06/13/14 12:25	06/16/14 15:11		
Naphthalene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	91-20-3	
Nitrobenzene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	98-95-3	
2-Nitrophenol	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	88-75-5	
4-Nitrophenol	ND ug/L	50.0	1	06/13/14 12:25	06/16/14 15:11	100-02-7	
N-Nitrosodimethylamine	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	62-75-9	
N-Nitroso-di-n-propylamine	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	621-64-7	
N-Nitrosodiphenylamine	ND ug/L	10.0	1	06/13/14 12:25	06/16/14 15:11	86-30-6	
Pentachlorophenol	ND ug/L	10.0	1	06/13/14 12:25	06/16/14 15:11	87-86-5	
Phenanthrene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	85-01-8	
Phenol	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	108-95-2	
Pyrene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	129-00-0	
1,2,4-Trichlorobenzene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	120-82-1	
2,4,6-Trichlorophenol	ND ug/L	10.0	1	06/13/14 12:25	06/16/14 15:11	88-06-2	
Surrogates							
Nitrobenzene-d5 (S)	22 %	10-120	1	06/13/14 12:25	06/16/14 15:11	4165-60-0	H5
2-Fluorobiphenyl (S)	21 %	15-120	1	06/13/14 12:25	06/16/14 15:11	321-60-8	
Terphenyl-d14 (S)	63 %	11-131	1	06/13/14 12:25	06/16/14 15:11	1718-51-0	
Phenol-d6 (S)	8 %	10-120	1	06/13/14 12:25	06/16/14 15:11	13127-88-3	S2
2-Fluorophenol (S)	13 %	10-120	1	06/13/14 12:25	06/16/14 15:11	367-12-4	
2,4,6-Tribromophenol (S)	44 %	10-137	1	06/13/14 12:25	06/16/14 15:11	118-79-6	

624 Volatile Organics

Analytical Method: EPA 624

Acrolein	ND ug/L	5.0	1	06/07/14 07:50	107-02-8
Acrylonitrile	ND ug/L	50.0	1	06/07/14 07:50	107-13-1
Benzene	ND ug/L	2.0	1	06/07/14 07:50	71-43-2
Bromodichloromethane	ND ug/L	2.0	1	06/07/14 07:50	75-27-4
Bromoform	ND ug/L	2.0	1	06/07/14 07:50	75-25-2
Bromomethane	ND ug/L	2.0	1	06/07/14 07:50	74-83-9
Carbon tetrachloride	ND ug/L	2.0	1	06/07/14 07:50	56-23-5

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: EXPANDED EFFLUENT TESTING

Pace Project No.: 92203930

Sample: EFFLUENT COMP Lab ID: 92203930001 Collected: 06/03/14 07:30 Received: 06/04/14 09:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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625 MSSV

Analytical Method: EPA 625 Preparation Method: EPA 625

Dimethylphthalate	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	131-11-3	
Di-n-butylphthalate	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	84-74-2	
4,6-Dinitro-2-methylphenol	ND ug/L	20.0	1	06/13/14 12:25	06/16/14 15:11	534-52-1	
2,4-Dinitrophenol	ND ug/L	50.0	1	06/13/14 12:25	06/16/14 15:11	51-28-5	
2,4-Dinitrotoluene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	121-14-2	
2,6-Dinitrotoluene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	606-20-2	
Di-n-octylphthalate	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	117-84-0	
1,2-Diphenylhydrazine	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	122-66-7	
bis(2-Ethylhexyl)phthalate	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	117-81-7	
Fluoranthene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	206-44-0	
Fluorene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	86-73-7	
Hexachloro-1,3-butadiene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	87-68-3	
Hexachlorobenzene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	118-74-1	
Hexachlorocyclopentadiene	ND ug/L	10.0	1	06/13/14 12:25	06/16/14 15:11	77-47-4	
Hexachloroethane	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	67-72-1	
Indeno(1,2,3-cd)pyrene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	193-39-5	
Isophorone	ND ug/L	10.0	1	06/13/14 12:25	06/16/14 15:11	78-59-1	
3&4-Methylphenol(m&p Cresol)	ND ug/L	10.0	1	06/13/14 12:25	06/16/14 15:11		
Naphthalene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	91-20-3	
Nitrobenzene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	98-95-3	
2-Nitrophenol	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	88-75-5	
4-Nitrophenol	ND ug/L	50.0	1	06/13/14 12:25	06/16/14 15:11	100-02-7	
N-Nitrosodimethylamine	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	62-75-9	
N-Nitroso-di-n-propylamine	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	621-64-7	
N-Nitrosodiphenylamine	ND ug/L	10.0	1	06/13/14 12:25	06/16/14 15:11	86-30-6	
Pentachlorophenol	ND ug/L	10.0	1	06/13/14 12:25	06/16/14 15:11	87-86-5	
Phenanthrene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	85-01-8	
Phenol	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	108-95-2	
Pyrene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	129-00-0	
1,2,4-Trichlorobenzene	ND ug/L	5.0	1	06/13/14 12:25	06/16/14 15:11	120-82-1	
2,4,6-Trichlorophenol	ND ug/L	10.0	1	06/13/14 12:25	06/16/14 15:11	88-06-2	
Surrogates							
Nitrobenzene-d5 (S)	22 %	10-120	1	06/13/14 12:25	06/16/14 15:11	4165-60-0	H5
2-Fluorobiphenyl (S)	21 %	15-120	1	06/13/14 12:25	06/16/14 15:11	321-60-8	
Terphenyl-d14 (S)	63 %	11-131	1	06/13/14 12:25	06/16/14 15:11	1718-51-0	
Phenol-d6 (S)	8 %	10-120	1	06/13/14 12:25	06/16/14 15:11	13127-88-3	S2
2-Fluorophenol (S)	13 %	10-120	1	06/13/14 12:25	06/16/14 15:11	367-12-4	
2,4,6-Tribromophenol (S)	44 %	10-137	1	06/13/14 12:25	06/16/14 15:11	118-79-6	

624 Volatile Organics

Analytical Method: EPA 624

Acrolein	ND ug/L	5.0	1	06/07/14 07:50	107-02-8
Acrylonitrile	ND ug/L	50.0	1	06/07/14 07:50	107-13-1
Benzene	ND ug/L	2.0	1	06/07/14 07:50	71-43-2
Bromodichloromethane	ND ug/L	2.0	1	06/07/14 07:50	75-27-4
Bromoform	ND ug/L	2.0	1	06/07/14 07:50	75-25-2
Bromomethane	ND ug/L	2.0	1	06/07/14 07:50	74-83-9
Carbon tetrachloride	ND ug/L	2.0	1	06/07/14 07:50	56-23-5

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

Sample: EFFLUENT COMP		Lab ID: 92203930001	Collected: 06/03/14 07:30	Received: 06/04/14 09:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics		Analytical Method: EPA 624						
Chlorobenzene	ND	ug/L	2.0	1		06/07/14 07:50	108-90-7	
Chloroethane	ND	ug/L	2.0	1		06/07/14 07:50	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	5.0	1		06/07/14 07:50	110-75-8	
Chloroform	ND	ug/L	2.0	1		06/07/14 07:50	67-66-3	
Chloromethane	ND	ug/L	2.0	1		06/07/14 07:50	74-87-3	
Dibromochloromethane	ND	ug/L	2.0	1		06/07/14 07:50	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	2.0	1		06/07/14 07:50	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	2.0	1		06/07/14 07:50	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	2.0	1		06/07/14 07:50	106-46-7	
1,1-Dichloroethane	ND	ug/L	2.0	1		06/07/14 07:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	2.0	1		06/07/14 07:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	2.0	1		06/07/14 07:50	75-35-4	
trans-1,2-Dichloroethene	ND	ug/L	2.0	1		06/07/14 07:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	2.0	1		06/07/14 07:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	2.0	1		06/07/14 07:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	2.0	1		06/07/14 07:50	10061-02-6	
Ethylbenzene	ND	ug/L	2.0	1		06/07/14 07:50	100-41-4	
Methylene Chloride	ND	ug/L	2.0	1		06/07/14 07:50	75-09-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	2.0	1		06/07/14 07:50	79-34-5	
Tetrachloroethene	ND	ug/L	2.0	1		06/07/14 07:50	127-18-4	
Toluene	ND	ug/L	2.0	1		06/07/14 07:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	2.0	1		06/07/14 07:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	2.0	1		06/07/14 07:50	79-00-5	
Trichloroethene	ND	ug/L	2.0	1		06/07/14 07:50	79-01-6	
Vinyl chloride	ND	ug/L	2.0	1		06/07/14 07:50	75-01-4	
Surrogates								
4-Bromofluorobenzene (S)	89 %		70-130	1		06/07/14 07:50	460-00-4	
Toluene-d8 (S)	98 %		70-130	1		06/07/14 07:50	2037-26-5	
1,2-Dichloroethane-d4 (S)	100 %		70-130	1		06/07/14 07:50	17060-07-0	
420.4 Phenolics, Total		Analytical Method: EPA 420.4						
Phenol	0.067	mg/L	0.0050	1		06/16/14 16:29	108-95-2	M1
4500CNE Cyanide, Total		Analytical Method: SM 4500-CN-E						
Cyanide	ND	mg/L	0.0050	1		06/15/14 12:03	57-12-5	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

QC Batch: MERP/6721 Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 Analysis Description: 245.1 Mercury
Associated Lab Samples: 92203930001

METHOD BLANK: 1217047 Matrix: Water
Associated Lab Samples: 92203930001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	06/10/14 15:50	

LABORATORY CONTROL SAMPLE: 1217048

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.8	111	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1217049 1217050

Parameter	Units	92201695004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	3.2	3.0	124	120	70-130	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1217051 1217052

Parameter	Units	92203930001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	3.0	3.0	120	120	70-130	0	20	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

QC Batch: MERP/6721 Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 Analysis Description: 245.1 Mercury
Associated Lab Samples: 92203930001

METHOD BLANK: 1217047 Matrix: Water
Associated Lab Samples: 92203930001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	06/10/14 15:50	

LABORATORY CONTROL SAMPLE: 1217048

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.8	111	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1217049 1217050

Parameter	Units	92201695004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	3.2	3.0	124	120	70-130	4 20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1217051 1217052

Parameter	Units	92203930001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	3.0	3.0	120	120	70-130	0 20	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

QC Batch:	MPRP/16141	Analysis Method:	EPA 200.7
QC Batch Method:	EPA 200.7	Analysis Description:	200.7 MET
Associated Lab Samples:	92203930001		

METHOD BLANK: 1215146 Matrix: Water
Associated Lab Samples: 92203930001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	06/06/14 19:55	
Arsenic	ug/L	ND	10.0	06/06/14 19:55	
Beryllium	ug/L	ND	1.0	06/06/14 19:55	
Cadmium	ug/L	ND	1.0	06/06/14 19:55	
Chromium	ug/L	ND	5.0	06/06/14 19:55	
Copper	ug/L	ND	5.0	06/06/14 19:55	
Hardness, Calcium (SM 2340B)	ug/L	ND	250	06/06/14 19:55	
Hardness, Magnesium (SM 2340B)	ug/L	ND	412	06/06/14 19:55	
Hardness, Total (SM 2340B)	ug/L	ND	662	06/06/14 19:55	
Lead	ug/L	ND	5.0	06/06/14 19:55	
Nickel	ug/L	ND	5.0	06/06/14 19:55	
Selenium	ug/L	ND	10.0	06/06/14 19:55	
Silver	ug/L	ND	5.0	06/06/14 19:55	
Thallium	ug/L	ND	10.0	06/06/14 19:55	
Zinc	ug/L	ND	10.0	06/06/14 19:55	

LABORATORY CONTROL SAMPLE: 1215147

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	462	92	85-115	
Arsenic	ug/L	500	459	92	85-115	
Beryllium	ug/L	500	468	94	85-115	
Cadmium	ug/L	500	466	93	85-115	
Chromium	ug/L	500	477	95	85-115	
Copper	ug/L	500	487	97	85-115	
Hardness, Calcium (SM 2340B)	ug/L		11900			
Hardness, Magnesium (SM 2340B)	ug/L		19400			
Hardness, Total (SM 2340B)	ug/L		31300			
Lead	ug/L	500	482	96	85-115	
Nickel	ug/L	500	468	94	85-115	
Selenium	ug/L	500	454	91	85-115	
Silver	ug/L	250	232	93	85-115	
Thallium	ug/L	500	487	97	85-115	
Zinc	ug/L	500	462	92	85-115	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1215148 1215149												
Parameter	Units	92203685004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Antimony	ug/L	ND	500	500	462	469	92	94	70-130	1	20	
Arsenic	ug/L	ND	500	500	456	463	91	93	70-130	2	20	
Beryllium	ug/L	ND	500	500	468	474	94	95	70-130	1	20	
Cadmium	ug/L	ND	500	500	463	469	93	94	70-130	1	20	
Chromium	ug/L	ND	500	500	477	482	95	96	70-130	1	20	
Copper	ug/L	ND	500	500	489	495	98	99	70-130	1	20	
Hardness, Calcium (SM 2340B)	ug/L	ND			11900	12000				1	20	
Hardness, Magnesium (SM 2340B)	ug/L	ND			19300	19600				1	20	
Hardness, Total (SM 2340B)	ug/L	ND			31200	31600				1	20	
Lead	ug/L	ND	500	500	481	487	96	97	70-130	1	20	
Nickel	ug/L	ND	500	500	467	471	93	94	70-130	1	20	
Selenium	ug/L	ND	500	500	448	452	89	90	70-130	1	20	
Silver	ug/L	ND	250	250	234	236	93	94	70-130	1	20	
Thallium	ug/L	ND	500	500	484	489	97	98	70-130	1	20	
Zinc	ug/L	ND	500	500	461	465	92	93	70-130	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1215150 1215151												
Parameter	Units	92203842001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Antimony	ug/L	ND	500	500	451	456	90	91	70-130	1	20	
Arsenic	ug/L	ND	500	500	487J	438J	97	88	70-130		20	
Beryllium	ug/L	ND	500	500	483	499	97	100	70-130	3	20	
Cadmium	ug/L	ND	500	500	488	510	96	101	70-130	4	20	
Chromium	ug/L	ND	500	500	486	470	97	94	70-130	3	20	
Copper	ug/L	ND	500	500	498	532	100	106	70-130	7	20	
Hardness, Calcium (SM 2340B)	ug/L	257000			278000	289000				4	20	
Hardness, Magnesium (SM 2340B)	ug/L	689000			733000	763000				4	20	
Hardness, Total (SM 2340B)	ug/L	946000			1010000	1050000				4	20	
Lead	ug/L	ND	500	500	442	506	88	101	70-130	14	20	
Nickel	ug/L	ND	500	500	496	512	97	100	70-130	3	20	
Selenium	ug/L	ND	500	500	658	652	105	104	70-130	1	20	
Silver	ug/L	ND	250	250	68.2J	21.9J	27	9	70-130		20 M6	
Thallium	ug/L	ND	500	500	476J	545	95	109	70-130		20	
Zinc	ug/L	ND	500	500	717	741	98	103	70-130	3	20	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1215148												1215149											
Parameter	Units	92203685004 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max	Qual											
			Spike Conc.	Spike Conc.							RPD												
Antimony	ug/L	ND	500	500	462	469	92	94	70-130	1	20												
Arsenic	ug/L	ND	500	500	456	463	91	93	70-130	2	20												
Beryllium	ug/L	ND	500	500	468	474	94	95	70-130	1	20												
Cadmium	ug/L	ND	500	500	463	469	93	94	70-130	1	20												
Chromium	ug/L	ND	500	500	477	482	95	96	70-130	1	20												
Copper	ug/L	ND	500	500	489	495	98	99	70-130	1	20												
Hardness, Calcium (SM 2340B)	ug/L	ND			11900	12000				1	20												
Hardness, Magnesium (SM 2340B)	ug/L	ND			19300	19600				1	20												
Hardness, Total (SM 2340B)	ug/L	ND			31200	31600				1	20												
Lead	ug/L	ND	500	500	481	487	96	97	70-130	1	20												
Nickel	ug/L	ND	500	500	467	471	93	94	70-130	1	20												
Selenium	ug/L	ND	500	500	448	452	89	90	70-130	1	20												
Silver	ug/L	ND	250	250	234	236	93	94	70-130	1	20												
Thallium	ug/L	ND	500	500	484	489	97	98	70-130	1	20												
Zinc	ug/L	ND	500	500	461	465	92	93	70-130	1	20												

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1215150												1215151											
Parameter	Units	92203842001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max	Qual											
			Spike Conc.	Spike Conc.							RPD												
Antimony	ug/L	ND	500	500	451	456	90	91	70-130	1	20												
Arsenic	ug/L	ND	500	500	487J	438J	97	88	70-130		20												
Beryllium	ug/L	ND	500	500	483	499	97	100	70-130	3	20												
Cadmium	ug/L	ND	500	500	488	510	96	101	70-130	4	20												
Chromium	ug/L	ND	500	500	486	470	97	94	70-130	3	20												
Copper	ug/L	ND	500	500	498	532	100	106	70-130	7	20												
Hardness, Calcium (SM 2340B)	ug/L	257000			278000	289000				4	20												
Hardness, Magnesium (SM 2340B)	ug/L	689000			733000	763000				4	20												
Hardness, Total (SM 2340B)	ug/L	946000			1010000	1050000				4	20												
Lead	ug/L	ND	500	500	442	506	88	101	70-130	14	20												
Nickel	ug/L	ND	500	500	496	512	97	100	70-130	3	20												
Selenium	ug/L	ND	500	500	658	652	105	104	70-130	1	20												
Silver	ug/L	ND	250	250	68.2J	21.9J	27	9	70-130		20	M6											
Thallium	ug/L	ND	500	500	476J	545	95	109	70-130		20												
Zinc	ug/L	ND	500	500	717	741	98	103	70-130	3	20												

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

QC Batch: MSV/27115 Analysis Method: EPA 624
QC Batch Method: EPA 624 Analysis Description: 624 MSV
Associated Lab Samples: 92203930001

METHOD BLANK: 1215998 Matrix: Water
Associated Lab Samples: 92203930001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	2.0	06/07/14 05:24	
1,1,2,2-Tetrachloroethane	ug/L	ND	2.0	06/07/14 05:24	
1,1,2-Trichloroethane	ug/L	ND	2.0	06/07/14 05:24	
1,1-Dichloroethane	ug/L	ND	2.0	06/07/14 05:24	
1,1-Dichloroethene	ug/L	ND	2.0	06/07/14 05:24	
1,2-Dichlorobenzene	ug/L	ND	2.0	06/07/14 05:24	
1,2-Dichloroethane	ug/L	ND	2.0	06/07/14 05:24	
1,2-Dichloropropane	ug/L	ND	2.0	06/07/14 05:24	
1,3-Dichlorobenzene	ug/L	ND	2.0	06/07/14 05:24	
1,4-Dichlorobenzene	ug/L	ND	2.0	06/07/14 05:24	
2-Chloroethylvinyl ether	ug/L	ND	5.0	06/07/14 05:24	
Acrolein	ug/L	ND	5.0	06/07/14 05:24	
Acrylonitrile	ug/L	ND	50.0	06/07/14 05:24	
Benzene	ug/L	ND	2.0	06/07/14 05:24	
Bromodichloromethane	ug/L	ND	2.0	06/07/14 05:24	
Bromoform	ug/L	ND	2.0	06/07/14 05:24	
Bromomethane	ug/L	ND	2.0	06/07/14 05:24	
Carbon tetrachloride	ug/L	ND	2.0	06/07/14 05:24	
Chlorobenzene	ug/L	ND	2.0	06/07/14 05:24	
Chloroethane	ug/L	ND	2.0	06/07/14 05:24	
Chloroform	ug/L	ND	2.0	06/07/14 05:24	
Chloromethane	ug/L	ND	2.0	06/07/14 05:24	
cis-1,3-Dichloropropene	ug/L	ND	2.0	06/07/14 05:24	
Dibromochloromethane	ug/L	ND	2.0	06/07/14 05:24	
Ethylbenzene	ug/L	ND	2.0	06/07/14 05:24	
Methylene Chloride	ug/L	ND	2.0	06/07/14 05:24	
Tetrachloroethene	ug/L	ND	2.0	06/07/14 05:24	
Toluene	ug/L	ND	2.0	06/07/14 05:24	
trans-1,2-Dichloroethene	ug/L	ND	2.0	06/07/14 05:24	
trans-1,3-Dichloropropene	ug/L	ND	2.0	06/07/14 05:24	
Trichloroethene	ug/L	ND	2.0	06/07/14 05:24	
Vinyl chloride	ug/L	ND	2.0	06/07/14 05:24	
1,2-Dichloroethane-d4 (S)	%	99	70-130	06/07/14 05:24	
4-Bromofluorobenzene (S)	%	99	70-130	06/07/14 05:24	
Toluene-d8 (S)	%	97	70-130	06/07/14 05:24	

LABORATORY CONTROL SAMPLE: 1215999

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.2	111	52-162	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

LABORATORY CONTROL SAMPLE: 1215999

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	46-157	
1,1,2-Trichloroethane	ug/L	20	19.9	100	52-150	
1,1-Dichloroethane	ug/L	20	19.3	97	59-155	
1,1-Dichloroethene	ug/L	20	26.9	135	1-234	
1,2-Dichlorobenzene	ug/L	20	21.3	107	18-190	
1,2-Dichloroethane	ug/L	20	19.2	96	49-155	
1,2-Dichloropropane	ug/L	20	20.2	101	1-210	
1,3-Dichlorobenzene	ug/L	20	21.1	105	59-156	
1,4-Dichlorobenzene	ug/L	20	20.7	104	18-190	
2-Chloroethylvinyl ether	ug/L	40	41.2	103	1-305	
Acrolein	ug/L	100	106	106	15-152	
Acrylonitrile	ug/L	100	108	108	75-132	
Benzene	ug/L	20	21.5	107	37-151	
Bromodichloromethane	ug/L	20	20.6	103	35-155	
Bromoform	ug/L	20	19.9	99	45-169	
Bromomethane	ug/L	20	20.8	104	1-242	
Carbon tetrachloride	ug/L	20	25.6	128	70-140	
Chlorobenzene	ug/L	20	21.0	105	37-160	
Chloroethane	ug/L	20	22.2	111	14-230	
Chloroform	ug/L	20	22.0	110	51-138	
Chloromethane	ug/L	20	21.9	109	1-273	
cis-1,3-Dichloropropene	ug/L	20	19.7	99	1-227	
Dibromochloromethane	ug/L	20	21.2	106	53-149	
Ethylbenzene	ug/L	20	21.5	107	37-162	
Methylene Chloride	ug/L	20	19.4	97	1-221	
Tetrachloroethene	ug/L	20	23.1	116	64-148	
Toluene	ug/L	20	21.5	107	47-150	
trans-1,2-Dichloroethene	ug/L	20	22.7	114	54-156	
trans-1,3-Dichloropropene	ug/L	20	20.0	100	17-183	
Trichloroethene	ug/L	20	21.0	105	71-157	
Vinyl chloride	ug/L	20	24.9	124	1-251	
1,2-Dichloroethane-d4 (S)	%			101	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			99	70-130	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

LABORATORY CONTROL SAMPLE: 1215999

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	46-157	
1,1,2-Trichloroethane	ug/L	20	19.9	100	52-150	
1,1-Dichloroethane	ug/L	20	19.3	97	59-155	
1,1-Dichloroethene	ug/L	20	26.9	135	1-234	
1,2-Dichlorobenzene	ug/L	20	21.3	107	18-190	
1,2-Dichloroethane	ug/L	20	19.2	96	49-155	
1,2-Dichloropropane	ug/L	20	20.2	101	1-210	
1,3-Dichlorobenzene	ug/L	20	21.1	105	59-156	
1,4-Dichlorobenzene	ug/L	20	20.7	104	18-190	
2-Chloroethylvinyl ether	ug/L	40	41.2	103	1-305	
Acrolein	ug/L	100	106	106	15-152	
Acrylonitrile	ug/L	100	108	108	75-132	
Benzene	ug/L	20	21.5	107	37-151	
Bromodichloromethane	ug/L	20	20.6	103	35-155	
Bromoform	ug/L	20	19.9	99	45-169	
Bromomethane	ug/L	20	20.8	104	1-242	
Carbon tetrachloride	ug/L	20	25.6	128	70-140	
Chlorobenzene	ug/L	20	21.0	105	37-160	
Chloroethane	ug/L	20	22.2	111	14-230	
Chloroform	ug/L	20	22.0	110	51-138	
Chloromethane	ug/L	20	21.9	109	1-273	
cis-1,3-Dichloropropene	ug/L	20	19.7	99	1-227	
Dibromochloromethane	ug/L	20	21.2	106	53-149	
Ethylbenzene	ug/L	20	21.5	107	37-162	
Methylene Chloride	ug/L	20	19.4	97	1-221	
Tetrachloroethene	ug/L	20	23.1	116	64-148	
Toluene	ug/L	20	21.5	107	47-150	
trans-1,2-Dichloroethene	ug/L	20	22.7	114	54-156	
trans-1,3-Dichloropropene	ug/L	20	20.0	100	17-183	
Trichloroethene	ug/L	20	21.0	105	71-157	
Vinyl chloride	ug/L	20	24.9	124	1-251	
1,2-Dichloroethane-d4 (S)	%			101	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			99	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

QC Batch:	OEXT/28263	Analysis Method:	EPA 625
QC Batch Method:	EPA 625	Analysis Description:	625 MSS
Associated Lab Samples:	92203930001		

METHOD BLANK: 1221118 Matrix: Water
Associated Lab Samples: 92203930001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	5.0	06/16/14 14:15	
1,2-Dichlorobenzene	ug/L	ND	5.0	06/16/14 14:15	
1,2-Diphenylhydrazine	ug/L	ND	5.0	06/16/14 14:15	
1,3-Dichlorobenzene	ug/L	ND	5.0	06/16/14 14:15	
1,4-Dichlorobenzene	ug/L	ND	5.0	06/16/14 14:15	
2,4,6-Trichlorophenol	ug/L	ND	10.0	06/16/14 14:15	
2,4-Dichlorophenol	ug/L	ND	5.0	06/16/14 14:15	
2,4-Dimethylphenol	ug/L	ND	10.0	06/16/14 14:15	
2,4-Dinitrophenol	ug/L	ND	50.0	06/16/14 14:15	
2,4-Dinitrotoluene	ug/L	ND	5.0	06/16/14 14:15	
2,6-Dinitrotoluene	ug/L	ND	5.0	06/16/14 14:15	
2-Chloronaphthalene	ug/L	ND	5.0	06/16/14 14:15	
2-Chlorophenol	ug/L	ND	5.0	06/16/14 14:15	
2-Nitrophenol	ug/L	ND	5.0	06/16/14 14:15	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	10.0	06/16/14 14:15	
3,3'-Dichlorobenzidine	ug/L	ND	25.0	06/16/14 14:15	
4,6-Dinitro-2-methylphenol	ug/L	ND	20.0	06/16/14 14:15	
4-Bromophenylphenyl ether	ug/L	ND	5.0	06/16/14 14:15	
4-Chlorophenylphenyl ether	ug/L	ND	5.0	06/16/14 14:15	
4-Nitrophenol	ug/L	ND	50.0	06/16/14 14:15	
Acenaphthene	ug/L	ND	5.0	06/16/14 14:15	
Acenaphthylene	ug/L	ND	5.0	06/16/14 14:15	
Anthracene	ug/L	ND	5.0	06/16/14 14:15	
Benzidine	ug/L	ND	50.0	06/16/14 14:15	
Benzo(a)anthracene	ug/L	ND	5.0	06/16/14 14:15	
Benzo(a)pyrene	ug/L	ND	5.0	06/16/14 14:15	
Benzo(b)fluoranthene	ug/L	ND	5.0	06/16/14 14:15	
Benzo(g,h,i)perylene	ug/L	ND	5.0	06/16/14 14:15	
Benzo(k)fluoranthene	ug/L	ND	5.0	06/16/14 14:15	
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	06/16/14 14:15	
bis(2-Chloroethyl) ether	ug/L	ND	5.0	06/16/14 14:15	
bis(2-Chloroisopropyl) ether	ug/L	ND	5.0	06/16/14 14:15	
bis(2-Ethylhexyl)phthalate	ug/L	ND	5.0	06/16/14 14:15	
Butylbenzylphthalate	ug/L	ND	5.0	06/16/14 14:15	
Chrysene	ug/L	ND	5.0	06/16/14 14:15	
Di-n-butylphthalate	ug/L	ND	5.0	06/16/14 14:15	
Di-n-octylphthalate	ug/L	ND	5.0	06/16/14 14:15	
Dibenz(a,h)anthracene	ug/L	ND	5.0	06/16/14 14:15	
Diethylphthalate	ug/L	ND	5.0	06/16/14 14:15	
Dimethylphthalate	ug/L	ND	5.0	06/16/14 14:15	
Fluoranthene	ug/L	ND	5.0	06/16/14 14:15	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING

Pace Project No.: 92203930

METHOD BLANK: 1221118

Matrix: Water

Associated Lab Samples: 92203930001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Fluorene	ug/L	ND	5.0	06/16/14 14:15	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	06/16/14 14:15	
Hexachlorobenzene	ug/L	ND	5.0	06/16/14 14:15	
Hexachlorocyclopentadiene	ug/L	ND	10.0	06/16/14 14:15	
Hexachloroethane	ug/L	ND	5.0	06/16/14 14:15	
Indeno(1,2,3-cd)pyrene	ug/L	ND	5.0	06/16/14 14:15	
Isophorone	ug/L	ND	10.0	06/16/14 14:15	
N-Nitroso-di-n-propylamine	ug/L	ND	5.0	06/16/14 14:15	
N-Nitrosodimethylamine	ug/L	ND	5.0	06/16/14 14:15	
N-Nitrosodiphenylamine	ug/L	ND	10.0	06/16/14 14:15	
Naphthalene	ug/L	ND	5.0	06/16/14 14:15	
Nitrobenzene	ug/L	ND	5.0	06/16/14 14:15	
Pentachlorophenol	ug/L	ND	10.0	06/16/14 14:15	
Phenanthrene	ug/L	ND	5.0	06/16/14 14:15	
Phenol	ug/L	ND	5.0	06/16/14 14:15	
Pyrene	ug/L	ND	5.0	06/16/14 14:15	
2,4,6-Tribromophenol (S)	%	75	10-137	06/16/14 14:15	
2-Fluorobiphenyl (S)	%	74	15-120	06/16/14 14:15	
2-Fluorophenol (S)	%	41	10-120	06/16/14 14:15	
Nitrobenzene-d5 (S)	%	74	10-120	06/16/14 14:15	
Phenol-d6 (S)	%	27	10-120	06/16/14 14:15	
Terphenyl-d14 (S)	%	91	11-131	06/16/14 14:15	

LABORATORY CONTROL SAMPLE: 1221119

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	33.3	67	44-142	
1,2-Dichlorobenzene	ug/L	50	32.8	66	32-129	
1,2-Diphenylhydrazine	ug/L	50	43.6	87	25-150	
1,3-Dichlorobenzene	ug/L	50	31.7	63	1-172	
1,4-Dichlorobenzene	ug/L	50	33.8	68	20-124	
2,4,6-Trichlorophenol	ug/L	50	35.6	71	37-144	
2,4-Dichlorophenol	ug/L	50	35.8	72	1-191	
2,4-Dimethylphenol	ug/L	50	32.8	66	32-119	
2,4-Dinitrophenol	ug/L	250	155	62	1-181	
2,4-Dinitrotoluene	ug/L	50	44.7	89	39-139	
2,6-Dinitrotoluene	ug/L	50	44.4	89	50-158	
2-Chloronaphthalene	ug/L	50	36.9	74	60-118	
2-Chlorophenol	ug/L	50	31.5	63	23-134	
2-Nitrophenol	ug/L	50	35.6	71	29-182	
3&4-Methylphenol(m&p Cresol)	ug/L	50	24.7	49	25-150	
3,3'-Dichlorobenzidine	ug/L	100	78.2	78	1-262	
4,6-Dinitro-2-methylphenol	ug/L	100	77.7	78	1-181	
4-Bromophenylphenyl ether	ug/L	50	41.2	82	53-127	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

METHOD BLANK: 1221118 Matrix: Water
Associated Lab Samples: 92203930001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Fluorene	ug/L	ND	5.0	06/16/14 14:15	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	06/16/14 14:15	
Hexachlorobenzene	ug/L	ND	5.0	06/16/14 14:15	
Hexachlorocyclopentadiene	ug/L	ND	10.0	06/16/14 14:15	
Hexachloroethane	ug/L	ND	5.0	06/16/14 14:15	
Indeno(1,2,3-cd)pyrene	ug/L	ND	5.0	06/16/14 14:15	
Isophorone	ug/L	ND	10.0	06/16/14 14:15	
N-Nitroso-di-n-propylamine	ug/L	ND	5.0	06/16/14 14:15	
N-Nitrosodimethylamine	ug/L	ND	5.0	06/16/14 14:15	
N-Nitrosodiphenylamine	ug/L	ND	10.0	06/16/14 14:15	
Naphthalene	ug/L	ND	5.0	06/16/14 14:15	
Nitrobenzene	ug/L	ND	5.0	06/16/14 14:15	
Pentachlorophenol	ug/L	ND	10.0	06/16/14 14:15	
Phenanthrene	ug/L	ND	5.0	06/16/14 14:15	
Phenol	ug/L	ND	5.0	06/16/14 14:15	
Pyrene	ug/L	ND	5.0	06/16/14 14:15	
2,4,6-Tribromophenol (S)	%	75	10-137	06/16/14 14:15	
2-Fluorobiphenyl (S)	%	74	15-120	06/16/14 14:15	
2-Fluorophenol (S)	%	41	10-120	06/16/14 14:15	
Nitrobenzene-d5 (S)	%	74	10-120	06/16/14 14:15	
Phenol-d6 (S)	%	27	10-120	06/16/14 14:15	
Terphenyl-d14 (S)	%	91	11-131	06/16/14 14:15	

LABORATORY CONTROL SAMPLE: 1221119

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	33.3	67	44-142	
1,2-Dichlorobenzene	ug/L	50	32.8	66	32-129	
1,2-Diphenylhydrazine	ug/L	50	43.6	87	25-150	
1,3-Dichlorobenzene	ug/L	50	31.7	63	1-172	
1,4-Dichlorobenzene	ug/L	50	33.8	68	20-124	
2,4,6-Trichlorophenol	ug/L	50	35.6	71	37-144	
2,4-Dichlorophenol	ug/L	50	35.8	72	1-191	
2,4-Dimethylphenol	ug/L	50	32.8	66	32-119	
2,4-Dinitrophenol	ug/L	250	155	62	1-181	
2,4-Dinitrotoluene	ug/L	50	44.7	89	39-139	
2,6-Dinitrotoluene	ug/L	50	44.4	89	50-158	
2-Chloronaphthalene	ug/L	50	36.9	74	60-118	
2-Chlorophenol	ug/L	50	31.5	63	23-134	
2-Nitrophenol	ug/L	50	35.6	71	29-182	
3&4-Methylphenol(m&p Cresol)	ug/L	50	24.7	49	25-150	
3,3'-Dichlorobenzidine	ug/L	100	78.2	78	1-262	
4,6-Dinitro-2-methylphenol	ug/L	100	77.7	78	1-181	
4-Bromophenylphenyl ether	ug/L	50	41.2	82	53-127	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

LABORATORY CONTROL SAMPLE: 1221119

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Chlorophenylphenyl ether	ug/L	50	37.8	76	25-158	
4-Nitrophenol	ug/L	250	83.8	34	1-132	
Acenaphthene	ug/L	50	36.3	73	47-145	
Acenaphthylene	ug/L	50	36.4	73	33-145	
Anthracene	ug/L	50	39.7	79	1-166	
Benzidine	ug/L	100	10.7J	11	25-150 L2	
Benzo(a)anthracene	ug/L	50	41.1	82	33-143	
Benzo(a)pyrene	ug/L	50	42.0	84	17-163	
Benzo(b)fluoranthene	ug/L	50	40.8	82	24-159	
Benzo(g,h,i)perylene	ug/L	50	38.1	76	1-219	
Benzo(k)fluoranthene	ug/L	50	42.6	85	11-162	
bis(2-Chloroethoxy)methane	ug/L	50	35.5	71	33-184	
bis(2-Chloroethyl) ether	ug/L	50	35.9	72	12-158	
bis(2-Chloroisopropyl) ether	ug/L	50	32.4	65	36-166	
bis(2-Ethylhexyl)phthalate	ug/L	50	47.8	96	8-158	
Butylbenzylphthalate	ug/L	50	47.5	95	1-152	
Chrysene	ug/L	50	41.7	83	17-168	
Di-n-butylphthalate	ug/L	50	41.1	82	1-118	
Di-n-octylphthalate	ug/L	50	43.9	88	4-146	
Dibenz(a,h)anthracene	ug/L	50	38.8	78	1-227	
Diethylphthalate	ug/L	50	37.4	75	1-114	
Dimethylphthalate	ug/L	50	37.2	74	1-112	
Fluoranthene	ug/L	50	37.1	74	26-137	
Fluorene	ug/L	50	37.0	74	59-121	
Hexachloro-1,3-butadiene	ug/L	50	32.4	65	24-116	
Hexachlorobenzene	ug/L	50	38.0	76	1-152	
Hexachlorocyclopentadiene	ug/L	50	36.5	73	25-150	
Hexachloroethane	ug/L	50	31.6	63	40-113	
Indeno(1,2,3-cd)pyrene	ug/L	50	30.7	61	1-171	
Isophorone	ug/L	50	39.0	78	21-196	
N-Nitroso-di-n-propylamine	ug/L	50	32.9	66	1-230	
N-Nitrosodimethylamine	ug/L	50	23.7	47	25-150	
N-Nitrosodiphenylamine	ug/L	50	41.7	83	25-150	
Naphthalene	ug/L	50	34.3	69	21-133	
Nitrobenzene	ug/L	50	43.3	87	35-180	
Pentachlorophenol	ug/L	100	67.1	67	14-176	
Phenanthrene	ug/L	50	38.2	76	54-120	
Phenol	ug/L	50	16.1	32	5-112	
Pyrene	ug/L	50	46.4	93	52-115	
2,4,6-Tribromophenol (S)	%			77	10-137	
2-Fluorobiphenyl (S)	%			77	15-120	
2-Fluorophenol (S)	%			42	10-120	
Nitrobenzene-d5 (S)	%			70	10-120	
Phenol-d6 (S)	%			28	10-120	
Terphenyl-d14 (S)	%			91	11-131	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

QC Batch: WETA/19323 Analysis Method: EPA 420.4
QC Batch Method: EPA 420.4 Analysis Description: 420.4 Phenolics
Associated Lab Samples: 92203930001

METHOD BLANK: 1222052 Matrix: Water
Associated Lab Samples: 92203930001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenol	mg/L	ND	0.0050	06/16/14 16:27	

LABORATORY CONTROL SAMPLE: 1222053

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenol	mg/L	.05	0.052	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1222054 1222055

Parameter	Units	92203930001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phenol	mg/L	0.067	.05	.05	0.064	0.065	-5	-3	90-110	1	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1222056 1222057

Parameter	Units	92204035001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phenol	mg/L	0.17	.05	.05	0.21	0.30	78	268	90-110	37	20	M6,R1

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REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

QC Batch: WETA/19323 Analysis Method: EPA 420.4
QC Batch Method: EPA 420.4 Analysis Description: 420.4 Phenolics
Associated Lab Samples: 92203930001

METHOD BLANK: 1222052 Matrix: Water
Associated Lab Samples: 92203930001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenol	mg/L	ND	0.0050	06/16/14 16:27	

LABORATORY CONTROL SAMPLE: 1222053

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenol	mg/L	.05	0.052	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1222054 1222055

Parameter	Units	92203930001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max		
										RPD	RPD	Qual
Phenol	mg/L	0.067	.05	.05	0.064	0.065	-5	-3	90-110	1	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1222056 1222057

Parameter	Units	92204035001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max		
										RPD	RPD	Qual
Phenol	mg/L	0.17	.05	.05	0.21	0.30	78	268	90-110	37	20	M6,R1

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

QC Batch: WETA/19308 Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 92203930001

METHOD BLANK: 1221391 Matrix: Water
Associated Lab Samples: 92203930001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	06/15/14 12:02	

LABORATORY CONTROL SAMPLE: 1221392

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.11	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1221393 1221394

Parameter	Units	92203930001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	.1	.1	0.092	0.089	88	85	75-125	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1221395 1221396

Parameter	Units	92204064006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	.1	.1	0.017	0.10	13	99	75-125	144	20	M1,R1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Acid preservation may not be appropriate for 2-Chloroethylvinyl ether, Styrene, and Vinyl chloride.

LOD - Limit of Detection.

LOQ - Limit of Quantitation.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-C Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

H5 Reanalysis conducted in excess of EPA method holding time. Results confirm original analysis performed in hold time.

L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

R1 RPD value was outside control limits.

S2 Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Acid preservation may not be appropriate for 2-Chloroethylvinyl ether, Styrene, and Vinyl chloride.

LOD - Limit of Detection.

LOQ - Limit of Quantitation.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-C Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

H5 Reanalysis conducted in excess of EPA method holding time. Results confirm original analysis performed in hold time.

L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

R1 RPD value was outside control limits.

S2 Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92203930

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92203930001	EFFLUENT COMP	EPA 200.7	MPRP/16141	EPA 200.7	ICP/14594
92203930001	EFFLUENT COMP	EPA 245.1	MERP/6721	EPA 245.1	MERC/6479
92203930001	EFFLUENT COMP	EPA 625	OEXT/28263	EPA 625	MSSV/9247
92203930001	EFFLUENT COMP	EPA 624	MSV/27115		
92203930001	EFFLUENT COMP	EPA 420.4	WETA/19323		
92203930001	EFFLUENT COMP	SM 4500-CN-E	WETA/19308		

REPORT OF LABORATORY ANALYSIS

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Document Name:
Sample Condition Upon Receipt (SCUR)
Document Number:
F-CHR-CS-003-rev.14

Document Revised: April 07, 2014
Page 1 of 2
Issuing Authority:
Pace Huntersville Quality Office

Client Name: Town of Purcellville

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Optional
Proj. Due Date
Proj. Name

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used: IR Gun T1102 T1401 Type of Ice: Not Blue None ☒ Samples on ice, cooling process has begun

Temp Correction Factor T1102: No Correction T1301: No Correction

Corrected Cooler Temp.: 3.3 °C

Biological Tissue is Frozen: Yes No N/A

Date and Initials of person examining contents: JD 6/4/14

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Samples checked for dechlorination:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

SCURF Review:	<u>DOB</u>	Date:	<u>6/4/14</u>
SRF Review:	<u>MD</u>	Date:	<u>6/4/14</u>

Place label here

WO#: 92203930



92203930

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Document Name:
Sample Condition Upon Receipt (SCUR)
Document Number:
F-CHR-CS-003-rev.14

Document Revised: April 07, 2014
Page 1 of 2
Issuing Authority:
Pace Huntersville Quality Office

Client Name: Town of Purcellville

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used: IR Gun T1102 **T1401** Type of Ice: ☒ Wet ☐ Blue ☐ None ☒ Samples on ice, cooling process has begun

Temp Correction Factor **T1102: No Correction T1301: No Correction**

Corrected Cooler Temp.: 3.3 °C

Biological Tissue is Frozen: Yes No **N/A**

Date and Initials of person examining contents: JS 6/4/14

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Samples checked for dechlorination:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

SCURF Review:

DOB

Date:

6/4/14

SRF Review:

MD

Date:

6/4/14

Place label here

WO#: 92203930



92203930

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: **Section B** Required Project Information: **Section C** Invoice Information:

Company: Town of Purcellville	Report To: Scott House	Attention: Jenny Austin	Company Name: Town of Purcellville
Address: 1001 S. 20th St.	Copy To: Susan Davis	Address: 221 Nursery Ave., Purcellville, VA 20132	Reference: 537445 222 75
Phone: 540-338-4945	Project Name: Expanded Effluent Testing	Project Manager: Tabitha Dacal	Site Location: NPDES
Requested Due Date/AT: 10 days	Project Number: 537445	Pace Profile #: 3741-2	REGULATORY AGENCY: NPDES
			GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> OTHER <input type="checkbox"/>

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Outfall Pace Project No./Lab I.D.
1	Effluent COMP.	WT	WT	WT	6/2/14	7:30 AM	6/3/14	7:30 AM		2	X	625 MSSV	X		002
2	Effluent COMP.	WT	WT	WT	6/2/14	7:30 AM	6/3/14	7:30 AM		1	X	420.4 phenols	X		002
3	Effluent COMP.	WT	WT	WT	6/2/14	7:30 AM	6/3/14	7:30 AM		1	X	metals, Hg, barbores	X		002
4	Effluent COMP.	WT	WT	WT	6/2/14	7:30 AM	6/3/14	7:30 AM		1	X	4500 CN-ECyanide	X		002
5	Effluent COMP.	WT	WT	WT	6/2/14	7:30 AM	6/3/14	7:30 AM		3	X	624 volatile orgs	X		002
6															
7															
8															
9															
10															
11															
12															

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Aileen E. Davis	6-3-14	3:00 pm	John Smith	6/3/14	4:14	Temp in °C 3.3 Received on Ice (Y/N) Y Custody Sealed Cooler (Y/N) N Samples Intact (Y/N) Y

SAMPLER NAME AND SIGNATURE	PRINT Name of SAMPLER: JASON CHAMMAN	DATE Signed (MM/DD/YY): 06/03/14
SIGNATURE of SAMPLER: Jason Chapman		



July 23, 2014

Ms. Susan Davis
Town of Purcellville
1001 South 20th St.
Purcellville, VA 20132

RE: Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

Dear Ms. Davis:

Enclosed are the analytical results for sample(s) received by the laboratory on July 09, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jon D Bradley
jon.bradley@pacelabs.com
Project Manager

Enclosures

cc: Jenny Austin, Town of Purcellville



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001

Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
West Virginia Certification #: 357
Virginia/VELAP Certification #: 460221

Asheville Certification IDs

2225 Riverside Dr., Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
West Virginia Certification #: 356
Virginia/VELAP Certification #: 460222

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Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

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West Virginia Certification #: 356
Virginia/VELAP Certification #: 460222

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SAMPLE SUMMARY

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92208403001	EFFLUENT	Water	07/08/14 07:30	07/09/14 09:35

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92208403001	EFFLUENT	EPA 200.7	JMW	15	PASI-A
		EPA 245.1	HVK	1	PASI-A
		EPA 625	RES	63	PASI-C
		EPA 624	GAW	35	PASI-C
		EPA 420.4	DMN	1	PASI-A
		SM 4500-CN-E	JDA	1	PASI-A

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SAMPLE ANALYTE COUNT

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92208403001	EFFLUENT	EPA 200.7	JMW	15	PASI-A
		EPA 245.1	HVK	1	PASI-A
		EPA 625	RES	63	PASI-C
		EPA 624	GAW	35	PASI-C
		EPA 420.4	DMN	1	PASI-A
		SM 4500-CN-E	JDA	1	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

Sample: EFFLUENT		Lab ID: 92208403001	Collected: 07/08/14 07:30	Received: 07/09/14 09:35	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP		Analytical Method: EPA 200.7 Preparation Method: EPA 200.7						
Antimony	ND ug/L		5.0	1	07/10/14 15:50	07/12/14 01:47	7440-36-0	
Arsenic	ND ug/L		10.0	1	07/10/14 15:50	07/12/14 01:47	7440-38-2	
Beryllium	ND ug/L		1.0	1	07/10/14 15:50	07/12/14 01:47	7440-41-7	
Cadmium	ND ug/L		1.0	1	07/10/14 15:50	07/12/14 01:47	7440-43-9	
Chromium	ND ug/L		5.0	1	07/10/14 15:50	07/12/14 01:47	7440-47-3	
Copper	ND ug/L		5.0	1	07/10/14 15:50	07/12/14 01:47	7440-50-8	
Hardness, Calcium (SM 2340B)	94600 ug/L		250	1	07/10/14 15:50	07/12/14 01:47		
Hardness, Magnesium (SM 2340B)	47800 ug/L		412	1	07/10/14 15:50	07/12/14 01:47		
Lead	ND ug/L		5.0	1	07/10/14 15:50	07/12/14 01:47	7439-92-1	
Nickel	5.2 ug/L		5.0	1	07/10/14 15:50	07/12/14 01:47	7440-02-0	
Selenium	15.0 ug/L		10.0	1	07/10/14 15:50	07/12/14 01:47	7782-49-2	
Silver	ND ug/L		5.0	1	07/10/14 15:50	07/12/14 01:47	7440-22-4	
Thallium	ND ug/L		10.0	1	07/10/14 15:50	07/12/14 01:47	7440-28-0	
Hardness, Total (SM 2340B)	142000 ug/L		662	1	07/10/14 15:50	07/12/14 01:47		
Zinc	31.1 ug/L		10.0	1	07/10/14 15:50	07/12/14 01:47	7440-66-6	
245.1 Mercury		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury	ND ug/L		0.20	1	07/10/14 21:00	07/15/14 17:05	7439-97-6	
625 MSSV		Analytical Method: EPA 625 Preparation Method: EPA 625						
Acenaphthene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	83-32-9	
Acenaphthylene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	208-96-8	
Anthracene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	120-12-7	
Benzidine	ND ug/L		50.0	1	07/09/14 14:49	07/11/14 00:57	92-87-5	
Benzo(a)anthracene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	56-55-3	
Benzo(a)pyrene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	50-32-8	
Benzo(b)fluoranthene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	191-24-2	
Benzo(k)fluoranthene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	207-08-9	
4-Bromophenylphenyl ether	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	101-55-3	
Butylbenzylphthalate	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	85-68-7	
bis(2-Chloroethoxy)methane	ND ug/L		10.0	1	07/09/14 14:49	07/11/14 00:57	111-91-1	
bis(2-Chloroethyl) ether	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	111-44-4	
bis(2-Chloroisopropyl) ether	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	108-60-1	
2-Chloronaphthalene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	91-58-7	
2-Chlorophenol	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	95-57-8	
4-Chlorophenylphenyl ether	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	7005-72-3	
Chrysene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	53-70-3	
1,2-Dichlorobenzene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	95-50-1	
1,3-Dichlorobenzene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	541-73-1	
1,4-Dichlorobenzene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	106-46-7	
3,3'-Dichlorobenzidine	ND ug/L		25.0	1	07/09/14 14:49	07/11/14 00:57	91-94-1	
2,4-Dichlorophenol	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	120-83-2	
Diethylphthalate	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	84-66-2	
2,4-Dimethylphenol	ND ug/L		10.0	1	07/09/14 14:49	07/11/14 00:57	105-67-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

Sample: EFFLUENT		Lab ID: 92208403001	Collected: 07/08/14 07:30	Received: 07/09/14 09:35	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

625 MSSV

Analytical Method: EPA 625 Preparation Method: EPA 625

Dimethylphthalate	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	131-11-3
Di-n-butylphthalate	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	84-74-2
4,6-Dinitro-2-methylphenol	ND ug/L	20.0	1	07/09/14 14:49	07/11/14 00:57	534-52-1
2,4-Dinitrophenol	ND ug/L	50.0	1	07/09/14 14:49	07/11/14 00:57	51-28-5
2,4-Dinitrotoluene	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	121-14-2
2,6-Dinitrotoluene	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	606-20-2
Di-n-octylphthalate	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	117-84-0
1,2-Diphenylhydrazine	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	122-66-7
bis(2-Ethylhexyl)phthalate	5.5 ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	117-81-7
Fluoranthene	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	206-44-0
Fluorene	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	86-73-7
Hexachloro-1,3-butadiene	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	87-68-3
Hexachlorobenzene	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	118-74-1
Hexachlorocyclopentadiene	ND ug/L	10.0	1	07/09/14 14:49	07/11/14 00:57	77-47-4
Hexachloroethane	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	67-72-1
Indeno(1,2,3-cd)pyrene	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	193-39-5
Isophorone	ND ug/L	10.0	1	07/09/14 14:49	07/11/14 00:57	78-59-1
3&4-Methylphenol(m&p Cresol)	ND ug/L	10.0	1	07/09/14 14:49	07/11/14 00:57	
Naphthalene	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	91-20-3
Nitrobenzene	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	98-95-3
2-Nitrophenol	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	88-75-5
4-Nitrophenol	ND ug/L	50.0	1	07/09/14 14:49	07/11/14 00:57	100-02-7
N-Nitrosodimethylamine	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	62-75-9
N-Nitroso-di-n-propylamine	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	621-64-7
N-Nitrosodiphenylamine	ND ug/L	10.0	1	07/09/14 14:49	07/11/14 00:57	86-30-6
Pentachlorophenol	ND ug/L	10.0	1	07/09/14 14:49	07/11/14 00:57	87-86-5
Phenanthrene	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	85-01-8
Phenol	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	108-95-2
Pyrene	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	129-00-0
1,2,4-Trichlorobenzene	ND ug/L	5.0	1	07/09/14 14:49	07/11/14 00:57	120-82-1
2,4,6-Trichlorophenol	ND ug/L	10.0	1	07/09/14 14:49	07/11/14 00:57	88-06-2

Surrogates

Nitrobenzene-d5 (S)	23 %	10-120	1	07/09/14 14:49	07/11/14 00:57	4165-60-0
2-Fluorobiphenyl (S)	26 %	15-120	1	07/09/14 14:49	07/11/14 00:57	321-60-8
Terphenyl-d14 (S)	37 %	11-131	1	07/09/14 14:49	07/11/14 00:57	1718-51-0
Phenol-d6 (S)	11 %	10-120	1	07/09/14 14:49	07/11/14 00:57	13127-88-3
2-Fluorophenol (S)	16 %	10-120	1	07/09/14 14:49	07/11/14 00:57	367-12-4
2,4,6-Tribromophenol (S)	32 %	10-137	1	07/09/14 14:49	07/11/14 00:57	118-79-6

624 Volatile Organics

Analytical Method: EPA 624

Acrolein	ND ug/L	5.0	1	07/22/14 12:47	107-02-8
Acrylonitrile	ND ug/L	50.0	1	07/22/14 12:47	107-13-1
Benzene	ND ug/L	2.0	1	07/22/14 12:47	71-43-2
Bromodichloromethane	ND ug/L	2.0	1	07/22/14 12:47	75-27-4
Bromoform	ND ug/L	2.0	1	07/22/14 12:47	75-25-2
Bromomethane	ND ug/L	2.0	1	07/22/14 12:47	74-83-9
Carbon tetrachloride	ND ug/L	2.0	1	07/22/14 12:47	56-23-5

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: EXPANDED EFFLUENT TESTING

Pace Project No.: 92208403

Sample: EFFLUENT Lab ID: 92208403001 Collected: 07/08/14 07:30 Received: 07/09/14 09:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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625 MSSV

Analytical Method: EPA 625 Preparation Method: EPA 625

Dimethylphthalate	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	131-11-3	
Di-n-butylphthalate	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	84-74-2	
4,6-Dinitro-2-methylphenol	ND ug/L		20.0	1	07/09/14 14:49	07/11/14 00:57	534-52-1	
2,4-Dinitrophenol	ND ug/L		50.0	1	07/09/14 14:49	07/11/14 00:57	51-28-5	
2,4-Dinitrotoluene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	121-14-2	
2,6-Dinitrotoluene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	606-20-2	
Di-n-octylphthalate	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	117-84-0	
1,2-Diphenylhydrazine	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	122-66-7	
bis(2-Ethylhexyl)phthalate	5.5 ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	117-81-7	
Fluoranthene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	206-44-0	
Fluorene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	86-73-7	
Hexachloro-1,3-butadiene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	87-68-3	
Hexachlorobenzene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	118-74-1	
Hexachlorocyclopentadiene	ND ug/L		10.0	1	07/09/14 14:49	07/11/14 00:57	77-47-4	
Hexachloroethane	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	67-72-1	
Indeno(1,2,3-cd)pyrene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	193-39-5	
Isophorone	ND ug/L		10.0	1	07/09/14 14:49	07/11/14 00:57	78-59-1	
3&4-Methylphenol(m&p Cresol)	ND ug/L		10.0	1	07/09/14 14:49	07/11/14 00:57		
Naphthalene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	91-20-3	
Nitrobenzene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	98-95-3	
2-Nitrophenol	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	88-75-5	
4-Nitrophenol	ND ug/L		50.0	1	07/09/14 14:49	07/11/14 00:57	100-02-7	
N-Nitrosodimethylamine	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	62-75-9	
N-Nitroso-di-n-propylamine	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	621-64-7	
N-Nitrosodiphenylamine	ND ug/L		10.0	1	07/09/14 14:49	07/11/14 00:57	86-30-6	
Pentachlorophenol	ND ug/L		10.0	1	07/09/14 14:49	07/11/14 00:57	87-86-5	
Phenanthrene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	85-01-8	
Phenol	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	108-95-2	
Pyrene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	129-00-0	
1,2,4-Trichlorobenzene	ND ug/L		5.0	1	07/09/14 14:49	07/11/14 00:57	120-82-1	
2,4,6-Trichlorophenol	ND ug/L		10.0	1	07/09/14 14:49	07/11/14 00:57	88-06-2	

Surrogates

Nitrobenzene-d5 (S)	23 %		10-120	1	07/09/14 14:49	07/11/14 00:57	4165-60-0	
2-Fluorobiphenyl (S)	26 %		15-120	1	07/09/14 14:49	07/11/14 00:57	321-60-8	
Terphenyl-d14 (S)	37 %		11-131	1	07/09/14 14:49	07/11/14 00:57	1718-51-0	
Phenol-d6 (S)	11 %		10-120	1	07/09/14 14:49	07/11/14 00:57	13127-88-3	
2-Fluorophenol (S)	16 %		10-120	1	07/09/14 14:49	07/11/14 00:57	367-12-4	
2,4,6-Tribromophenol (S)	32 %		10-137	1	07/09/14 14:49	07/11/14 00:57	118-79-6	

624 Volatile Organics

Analytical Method: EPA 624

Acrolein	ND ug/L		5.0	1		07/22/14 12:47	107-02-8	
Acrylonitrile	ND ug/L		50.0	1		07/22/14 12:47	107-13-1	
Benzene	ND ug/L		2.0	1		07/22/14 12:47	71-43-2	
Bromodichloromethane	ND ug/L		2.0	1		07/22/14 12:47	75-27-4	
Bromoform	ND ug/L		2.0	1		07/22/14 12:47	75-25-2	
Bromomethane	ND ug/L		2.0	1		07/22/14 12:47	74-83-9	
Carbon tetrachloride	ND ug/L		2.0	1		07/22/14 12:47	56-23-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

Sample: EFFLUENT		Lab ID: 92208403001	Collected: 07/08/14 07:30	Received: 07/09/14 09:35	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics		Analytical Method: EPA 624						
Chlorobenzene	ND ug/L		2.0	1		07/22/14 12:47	108-90-7	
Chloroethane	ND ug/L		2.0	1		07/22/14 12:47	75-00-3	
2-Chloroethylvinyl ether	ND ug/L		5.0	1		07/22/14 12:47	110-75-8	
Chloroform	ND ug/L		2.0	1		07/22/14 12:47	67-66-3	
Chloromethane	ND ug/L		2.0	1		07/22/14 12:47	74-87-3	
Dibromochloromethane	ND ug/L		2.0	1		07/22/14 12:47	124-48-1	
1,2-Dichlorobenzene	ND ug/L		2.0	1		07/22/14 12:47	95-50-1	
1,3-Dichlorobenzene	ND ug/L		2.0	1		07/22/14 12:47	541-73-1	
1,4-Dichlorobenzene	ND ug/L		2.0	1		07/22/14 12:47	106-46-7	
1,1-Dichloroethane	ND ug/L		2.0	1		07/22/14 12:47	75-34-3	
1,2-Dichloroethane	ND ug/L		2.0	1		07/22/14 12:47	107-06-2	
1,1-Dichloroethene	ND ug/L		2.0	1		07/22/14 12:47	75-35-4	
trans-1,2-Dichloroethene	ND ug/L		2.0	1		07/22/14 12:47	156-60-5	
1,2-Dichloropropane	ND ug/L		2.0	1		07/22/14 12:47	78-87-5	
cis-1,3-Dichloropropene	ND ug/L		2.0	1		07/22/14 12:47	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		2.0	1		07/22/14 12:47	10061-02-6	
Ethylbenzene	ND ug/L		2.0	1		07/22/14 12:47	100-41-4	
Methylene Chloride	ND ug/L		2.0	1		07/22/14 12:47	75-09-2	
1,1,2,2-Tetrachloroethane	ND ug/L		2.0	1		07/22/14 12:47	79-34-5	
Tetrachloroethene	ND ug/L		2.0	1		07/22/14 12:47	127-18-4	
Toluene	ND ug/L		2.0	1		07/22/14 12:47	108-88-3	
1,1,1-Trichloroethane	ND ug/L		2.0	1		07/22/14 12:47	71-55-6	
1,1,2-Trichloroethane	ND ug/L		2.0	1		07/22/14 12:47	79-00-5	
Trichloroethene	ND ug/L		2.0	1		07/22/14 12:47	79-01-6	
Vinyl chloride	ND ug/L		2.0	1		07/22/14 12:47	75-01-4	
Surrogates								
4-Bromofluorobenzene (S)	101 %		70-130	1		07/22/14 12:47	460-00-4	
Toluene-d8 (S)	93 %		70-130	1		07/22/14 12:47	2037-26-5	
1,2-Dichloroethane-d4 (S)	85 %		70-130	1		07/22/14 12:47	17060-07-0	
420.4 Phenolics, Total		Analytical Method: EPA 420.4						
Phenol	0.013 mg/L		0.0050	1		07/22/14 20:48	108-95-2	
4500CNE Cyanide, Total		Analytical Method: SM 4500-CN-E						
Cyanide	ND mg/L		0.0050	1		07/20/14 11:34	57-12-5	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

QC Batch: MERP/6838 Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 Analysis Description: 245.1 Mercury
Associated Lab Samples: 92208403001

METHOD BLANK: 1239817 Matrix: Water
Associated Lab Samples: 92208403001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	07/15/14 16:26	

LABORATORY CONTROL SAMPLE: 1239818

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.6	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1239819 1239820

Parameter	Units	92208234001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Mercury	ug/L	1.4	2.5	2.5	2.6	2.6	48	49	70-130	0 20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1239821 1239822

Parameter	Units	92208276001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	2.5	2.5	98	95	70-130	3 20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

QC Batch: MERP/6838 Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 Analysis Description: 245.1 Mercury
Associated Lab Samples: 92208403001

METHOD BLANK: 1239817 Matrix: Water
Associated Lab Samples: 92208403001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	07/15/14 16:26	

LABORATORY CONTROL SAMPLE: 1239818

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.6	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1239819 1239820

Parameter	Units	92208234001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Mercury	ug/L	1.4	2.5	2.5	2.6	2.6	48	49	70-130	0 20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1239821 1239822

Parameter	Units	92208276001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	2.5	2.5	98	95	70-130	3 20	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

QC Batch:	MPRP/16418	Analysis Method:	EPA 200.7
QC Batch Method:	EPA 200.7	Analysis Description:	200.7 MET
Associated Lab Samples:	92208403001		

METHOD BLANK: 1239338 Matrix: Water
Associated Lab Samples: 92208403001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	07/11/14 23:52	
Arsenic	ug/L	ND	10.0	07/11/14 23:52	
Beryllium	ug/L	ND	1.0	07/11/14 23:52	
Cadmium	ug/L	ND	1.0	07/11/14 23:52	
Chromium	ug/L	ND	5.0	07/11/14 23:52	
Copper	ug/L	ND	5.0	07/11/14 23:52	
Hardness, Calcium (SM 2340B)	ug/L	ND	250	07/11/14 23:52	
Hardness, Magnesium (SM 2340B)	ug/L	ND	412	07/11/14 23:52	
Hardness, Total (SM 2340B)	ug/L	ND	662	07/11/14 23:52	
Lead	ug/L	ND	5.0	07/11/14 23:52	
Nickel	ug/L	ND	5.0	07/11/14 23:52	
Selenium	ug/L	ND	10.0	07/11/14 23:52	
Silver	ug/L	ND	5.0	07/11/14 23:52	
Thallium	ug/L	ND	10.0	07/11/14 23:52	
Zinc	ug/L	ND	10.0	07/11/14 23:52	

LABORATORY CONTROL SAMPLE: 1239339

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	460	92	85-115	
Arsenic	ug/L	500	454	91	85-115	
Beryllium	ug/L	500	466	93	85-115	
Cadmium	ug/L	500	469	94	85-115	
Chromium	ug/L	500	471	94	85-115	
Copper	ug/L	500	456	91	85-115	
Hardness, Calcium (SM 2340B)	ug/L		11900			
Hardness, Magnesium (SM 2340B)	ug/L		19400			
Hardness, Total (SM 2340B)	ug/L		31300			
Lead	ug/L	500	454	91	85-115	
Nickel	ug/L	500	464	93	85-115	
Selenium	ug/L	500	448	90	85-115	
Silver	ug/L	250	235	94	85-115	
Thallium	ug/L	500	438	88	85-115	
Zinc	ug/L	500	459	92	85-115	

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REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1239340													1239341												
Parameter	Units	92208236006	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	RPD	Max	Qual												
		Result	Spike	Spike										Result	Result	% Rec	% Rec	RPD	RPD						
Antimony	ug/L	ND	500	500	486	493	97	98	70-130	1	20														
Arsenic	ug/L	ND	500	500	499	504	100	101	70-130	1	20														
Beryllium	ug/L	1.5	500	500	455	457	91	91	70-130	0	20														
Cadmium	ug/L	3.6	500	500	457	459	91	91	70-130	0	20														
Chromium	ug/L	255	500	500	717	725	92	94	70-130	1	20														
Copper	ug/L	33.0	500	500	509	515	95	96	70-130	1	20														
Hardness, Calcium (SM 2340B)	ug/L	99000			110000	112000					2	20													
Hardness, Magnesium (SM 2340B)	ug/L	10100			27200	27600					1	20													
Hardness, Total (SM 2340B)	ug/L	109000			137000	140000					2	20													
Lead	ug/L	ND	500	500	412	415	82	83	70-130	1	20														
Nickel	ug/L	25.5	500	500	456	459	86	87	70-130	1	20														
Selenium	ug/L	16.2	500	500	515	518	100	100	70-130	1	20														
Silver	ug/L	ND	250	250	250	251	100	100	70-130	0	20														
Thallium	ug/L	ND	500	500	357	359	71	72	70-130	1	20														
Zinc	ug/L	34.2	500	500	522	527	98	99	70-130	1	20														

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1239342													1239343												
Parameter	Units	92208345001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual													
			Spike Conc.	Spike Conc.																					
Antimony	ug/L	ND	500	500	478	480	95	96	70-130	0	20														
Arsenic	ug/L	ND	500	500	480	481	96	96	70-130	0	20														
Beryllium	ug/L	ND	500	500	461	470	92	94	70-130	2	20														
Cadmium	ug/L	ND	500	500	453	459	91	92	70-130	1	20														
Chromium	ug/L	ND	500	500	461	463	92	92	70-130	0	20														
Copper	ug/L	0.028 mg/L	500	500	505	502	95	95	70-130	1	20														
Hardness, Calcium (SM 2340B)	ug/L	33.0 mg/L			44600	45400				2	20														
Hardness, Magnesium (SM 2340B)	ug/L	14.5 mg/L			33400	33700				1	20														
Hardness, Total (SM 2340B)	ug/L	47.4 mg/L			78100	79100				1	20														
Lead	ug/L	ND	500	500	442	446	88	89	70-130	1	20														
Nickel	ug/L	ND	500	500	452	454	90	91	70-130	0	20														
Selenium	ug/L	ND	500	500	468	479	92	94	70-130	2	20														
Silver	ug/L	ND	250	250	233	234	93	93	70-130	0	20														
Thallium	ug/L	ND	500	500	414	417	83	83	70-130	1	20														
Zinc	ug/L	0.050 mg/L	500	500	512	519	92	94	70-130	1	20														

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REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1239340													1239341												
Parameter	Units	92208236006	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	Qual													
		Result	Spike	Spike									Result	Result	Result	Limit	RPD	RPD							
Antimony	ug/L	ND	500	500	486	493	97	98	70-130	1	20														
Arsenic	ug/L	ND	500	500	499	504	100	101	70-130	1	20														
Beryllium	ug/L	1.5	500	500	455	457	91	91	70-130	0	20														
Cadmium	ug/L	3.6	500	500	457	459	91	91	70-130	0	20														
Chromium	ug/L	255	500	500	717	725	92	94	70-130	1	20														
Copper	ug/L	33.0	500	500	509	515	95	96	70-130	1	20														
Hardness, Calcium (SM 2340B)	ug/L	99000			110000	112000				2	20														
Hardness, Magnesium (SM 2340B)	ug/L	10100			27200	27600				1	20														
Hardness, Total (SM 2340B)	ug/L	109000			137000	140000				2	20														
Lead	ug/L	ND	500	500	412	415	82	83	70-130	1	20														
Nickel	ug/L	25.5	500	500	456	459	86	87	70-130	1	20														
Selenium	ug/L	16.2	500	500	515	518	100	100	70-130	1	20														
Silver	ug/L	ND	250	250	250	251	100	100	70-130	0	20														
Thallium	ug/L	ND	500	500	357	359	71	72	70-130	1	20														
Zinc	ug/L	34.2	500	500	522	527	98	99	70-130	1	20														

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1239342													1239343												
Parameter	Units	92208345001	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	% Rec	Max	Qual												
		Result	Spike Conc.	Spike Conc.										Result	Result	% Rec	% Rec	Limits	RPD	RPD					
Antimony	ug/L	ND	500	500	478	480	95	96	70-130	0	20														
Arsenic	ug/L	ND	500	500	480	481	96	96	70-130	0	20														
Beryllium	ug/L	ND	500	500	461	470	92	94	70-130	2	20														
Cadmium	ug/L	ND	500	500	453	459	91	92	70-130	1	20														
Chromium	ug/L	ND	500	500	461	463	92	92	70-130	0	20														
Copper	ug/L	0.028	500	500	505	502	95	95	70-130	1	20														
Hardness, Calcium (SM 2340B)	ug/L	mg/L 33.0			44600	45400				2	20														
Hardness, Magnesium (SM 2340B)	ug/L	mg/L 14.5			33400	33700				1	20														
Hardness, Total (SM 2340B)	ug/L	mg/L 47.4			78100	79100				1	20														
Lead	ug/L	ND	500	500	442	446	88	89	70-130	1	20														
Nickel	ug/L	ND	500	500	452	454	90	91	70-130	0	20														
Selenium	ug/L	ND	500	500	468	479	92	94	70-130	2	20														
Silver	ug/L	ND	250	250	233	234	93	93	70-130	0	20														
Thallium	ug/L	ND	500	500	414	417	83	83	70-130	1	20														
Zinc	ug/L	0.050	500	500	512	519	92	94	70-130	1	20														

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

QC Batch: MSV/27673 Analysis Method: EPA 624
QC Batch Method: EPA 624 Analysis Description: 624 MSV
Associated Lab Samples: 92208403001

METHOD BLANK: 1246638 Matrix: Water
Associated Lab Samples: 92208403001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	2.0	07/22/14 11:42	
1,1,2,2-Tetrachloroethane	ug/L	ND	2.0	07/22/14 11:42	
1,1,2-Trichloroethane	ug/L	ND	2.0	07/22/14 11:42	
1,1-Dichloroethane	ug/L	ND	2.0	07/22/14 11:42	
1,1-Dichloroethene	ug/L	ND	2.0	07/22/14 11:42	
1,2-Dichlorobenzene	ug/L	ND	2.0	07/22/14 11:42	
1,2-Dichloroethane	ug/L	ND	2.0	07/22/14 11:42	
1,2-Dichloropropane	ug/L	ND	2.0	07/22/14 11:42	
1,3-Dichlorobenzene	ug/L	ND	2.0	07/22/14 11:42	
1,4-Dichlorobenzene	ug/L	ND	2.0	07/22/14 11:42	
2-Chloroethylvinyl ether	ug/L	ND	5.0	07/22/14 11:42	
Acrolein	ug/L	ND	5.0	07/22/14 11:42	
Acrylonitrile	ug/L	ND	50.0	07/22/14 11:42	
Benzene	ug/L	ND	2.0	07/22/14 11:42	
Bromodichloromethane	ug/L	ND	2.0	07/22/14 11:42	
Bromoform	ug/L	ND	2.0	07/22/14 11:42	
Bromomethane	ug/L	ND	2.0	07/22/14 11:42	
Carbon tetrachloride	ug/L	ND	2.0	07/22/14 11:42	
Chlorobenzene	ug/L	ND	2.0	07/22/14 11:42	
Chloroethane	ug/L	ND	2.0	07/22/14 11:42	
Chloroform	ug/L	ND	2.0	07/22/14 11:42	
Chloromethane	ug/L	ND	2.0	07/22/14 11:42	
cis-1,3-Dichloropropene	ug/L	ND	2.0	07/22/14 11:42	
Dibromochloromethane	ug/L	ND	2.0	07/22/14 11:42	
Ethylbenzene	ug/L	ND	2.0	07/22/14 11:42	
Methylene Chloride	ug/L	ND	2.0	07/22/14 11:42	
Tetrachloroethene	ug/L	ND	2.0	07/22/14 11:42	
Toluene	ug/L	ND	2.0	07/22/14 11:42	
trans-1,2-Dichloroethene	ug/L	ND	2.0	07/22/14 11:42	
trans-1,3-Dichloropropene	ug/L	ND	2.0	07/22/14 11:42	
Trichloroethene	ug/L	ND	2.0	07/22/14 11:42	
Vinyl chloride	ug/L	ND	2.0	07/22/14 11:42	
1,2-Dichloroethane-d4 (S)	%	86	70-130	07/22/14 11:42	
4-Bromofluorobenzene (S)	%	110	70-130	07/22/14 11:42	
Toluene-d8 (S)	%	93	70-130	07/22/14 11:42	

LABORATORY CONTROL SAMPLE: 1246639

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.2	96	52-162	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

LABORATORY CONTROL SAMPLE: 1246639

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	20	17.8	89	46-157	
1,1,2-Trichloroethane	ug/L	20	20.2	101	52-150	
1,1-Dichloroethane	ug/L	20	17.5	87	59-155	
1,1-Dichloroethene	ug/L	20	19.9	100	1-234	
1,2-Dichlorobenzene	ug/L	20	21.8	109	18-190	
1,2-Dichloroethane	ug/L	20	19.0	95	49-155	
1,2-Dichloropropane	ug/L	20	19.3	97	1-210	
1,3-Dichlorobenzene	ug/L	20	21.5	107	59-156	
1,4-Dichlorobenzene	ug/L	20	21.2	106	18-190	
2-Chloroethylvinyl ether	ug/L	40	27.9	70	1-305	
Acrolein	ug/L	100	67.3	67	15-152	
Acrylonitrile	ug/L	100	87.9	88	75-132	
Benzene	ug/L	20	19.8	99	37-151	
Bromodichloromethane	ug/L	20	24.1	120	35-155	
Bromoform	ug/L	20	22.7	113	45-169	
Bromomethane	ug/L	20	10.3	51	1-242	
Carbon tetrachloride	ug/L	20	22.8	114	70-140	
Chlorobenzene	ug/L	20	20.3	102	37-160	
Chloroethane	ug/L	20	14.0	70	14-230	
Chloroform	ug/L	20	21.9	109	51-138	
Chloromethane	ug/L	20	12.9	65	1-273	
cis-1,3-Dichloropropene	ug/L	20	21.0	105	1-227	
Dibromochloromethane	ug/L	20	24.0	120	53-149	
Ethylbenzene	ug/L	20	20.4	102	37-162	
Methylene Chloride	ug/L	20	17.3	87	1-221	
Tetrachloroethene	ug/L	20	24.0	120	64-148	
Toluene	ug/L	20	21.7	109	47-150	
trans-1,2-Dichloroethene	ug/L	20	19.4	97	54-156	
trans-1,3-Dichloropropene	ug/L	20	21.6	108	17-183	
Trichloroethene	ug/L	20	24.4	122	71-157	
Vinyl chloride	ug/L	20	12.0	60	1-251	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			111	70-130	
Toluene-d8 (S)	%			100	70-130	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

LABORATORY CONTROL SAMPLE: 1246639

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	20	17.8	89	46-157	
1,1,2-Trichloroethane	ug/L	20	20.2	101	52-150	
1,1-Dichloroethane	ug/L	20	17.5	87	59-155	
1,1-Dichloroethene	ug/L	20	19.9	100	1-234	
1,2-Dichlorobenzene	ug/L	20	21.8	109	18-190	
1,2-Dichloroethane	ug/L	20	19.0	95	49-155	
1,2-Dichloropropane	ug/L	20	19.3	97	1-210	
1,3-Dichlorobenzene	ug/L	20	21.5	107	59-156	
1,4-Dichlorobenzene	ug/L	20	21.2	106	18-190	
2-Chloroethylvinyl ether	ug/L	40	27.9	70	1-305	
Acrolein	ug/L	100	67.3	67	15-152	
Acrylonitrile	ug/L	100	87.9	88	75-132	
Benzene	ug/L	20	19.8	99	37-151	
Bromodichloromethane	ug/L	20	24.1	120	35-155	
Bromoform	ug/L	20	22.7	113	45-169	
Bromomethane	ug/L	20	10.3	51	1-242	
Carbon tetrachloride	ug/L	20	22.8	114	70-140	
Chlorobenzene	ug/L	20	20.3	102	37-160	
Chloroethane	ug/L	20	14.0	70	14-230	
Chloroform	ug/L	20	21.9	109	51-138	
Chloromethane	ug/L	20	12.9	65	1-273	
cis-1,3-Dichloropropene	ug/L	20	21.0	105	1-227	
Dibromochloromethane	ug/L	20	24.0	120	53-149	
Ethylbenzene	ug/L	20	20.4	102	37-162	
Methylene Chloride	ug/L	20	17.3	87	1-221	
Tetrachloroethene	ug/L	20	24.0	120	64-148	
Toluene	ug/L	20	21.7	109	47-150	
trans-1,2-Dichloroethene	ug/L	20	19.4	97	54-156	
trans-1,3-Dichloropropene	ug/L	20	21.6	108	17-183	
Trichloroethene	ug/L	20	24.4	122	71-157	
Vinyl chloride	ug/L	20	12.0	60	1-251	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			111	70-130	
Toluene-d8 (S)	%			100	70-130	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

QC Batch:	OEXT/28749	Analysis Method:	EPA 625
QC Batch Method:	EPA 625	Analysis Description:	625 MSS
Associated Lab Samples:	92208403001		

METHOD BLANK:	1238247	Matrix:	Water
Associated Lab Samples:	92208403001		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	5.0	07/10/14 07:31	
1,2-Dichlorobenzene	ug/L	ND	5.0	07/10/14 07:31	
1,2-Diphenylhydrazine	ug/L	ND	5.0	07/10/14 07:31	
1,3-Dichlorobenzene	ug/L	ND	5.0	07/10/14 07:31	
1,4-Dichlorobenzene	ug/L	ND	5.0	07/10/14 07:31	
2,4,6-Trichlorophenol	ug/L	ND	10.0	07/10/14 07:31	
2,4-Dichlorophenol	ug/L	ND	5.0	07/10/14 07:31	
2,4-Dimethylphenol	ug/L	ND	10.0	07/10/14 07:31	
2,4-Dinitrophenol	ug/L	ND	50.0	07/10/14 07:31	
2,4-Dinitrotoluene	ug/L	ND	5.0	07/10/14 07:31	
2,6-Dinitrotoluene	ug/L	ND	5.0	07/10/14 07:31	
2-Chloronaphthalene	ug/L	ND	5.0	07/10/14 07:31	
2-Chlorophenol	ug/L	ND	5.0	07/10/14 07:31	
2-Nitrophenol	ug/L	ND	5.0	07/10/14 07:31	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	10.0	07/10/14 07:31	
3,3'-Dichlorobenzidine	ug/L	ND	25.0	07/10/14 07:31	
4,6-Dinitro-2-methylphenol	ug/L	ND	20.0	07/10/14 07:31	
4-Bromophenylphenyl ether	ug/L	ND	5.0	07/10/14 07:31	
4-Chlorophenylphenyl ether	ug/L	ND	5.0	07/10/14 07:31	
4-Nitrophenol	ug/L	ND	50.0	07/10/14 07:31	
Acenaphthene	ug/L	ND	5.0	07/10/14 07:31	
Acenaphthylene	ug/L	ND	5.0	07/10/14 07:31	
Anthracene	ug/L	ND	5.0	07/10/14 07:31	
Benidine	ug/L	ND	50.0	07/10/14 07:31	
Benzo(a)anthracene	ug/L	ND	5.0	07/10/14 07:31	
Benzo(a)pyrene	ug/L	ND	5.0	07/10/14 07:31	
Benzo(b)fluoranthene	ug/L	ND	5.0	07/10/14 07:31	
Benzo(g,h,i)perylene	ug/L	ND	5.0	07/10/14 07:31	
Benzo(k)fluoranthene	ug/L	ND	5.0	07/10/14 07:31	
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	07/10/14 07:31	
bis(2-Chloroethyl) ether	ug/L	ND	5.0	07/10/14 07:31	
bis(2-Chloroisopropyl) ether	ug/L	ND	5.0	07/10/14 07:31	
bis(2-Ethylhexyl)phthalate	ug/L	ND	5.0	07/10/14 07:31	
Butylbenzylphthalate	ug/L	ND	5.0	07/10/14 07:31	
Chrysene	ug/L	ND	5.0	07/10/14 07:31	
Di-n-butylphthalate	ug/L	ND	5.0	07/10/14 07:31	
Di-n-octylphthalate	ug/L	ND	5.0	07/10/14 07:31	
Dibenz(a,h)anthracene	ug/L	ND	5.0	07/10/14 07:31	
Diethylphthalate	ug/L	ND	5.0	07/10/14 07:31	
Dimethylphthalate	ug/L	ND	5.0	07/10/14 07:31	
Fluoranthene	ug/L	ND	5.0	07/10/14 07:31	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

METHOD BLANK: 1238247

Matrix: Water

Associated Lab Samples: 92208403001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Fluorene	ug/L	ND	5.0	07/10/14 07:31	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	07/10/14 07:31	
Hexachlorobenzene	ug/L	ND	5.0	07/10/14 07:31	
Hexachlorocyclopentadiene	ug/L	ND	10.0	07/10/14 07:31	
Hexachloroethane	ug/L	ND	5.0	07/10/14 07:31	
Indeno(1,2,3-cd)pyrene	ug/L	ND	5.0	07/10/14 07:31	
Isophorone	ug/L	ND	10.0	07/10/14 07:31	
N-Nitroso-di-n-propylamine	ug/L	ND	5.0	07/10/14 07:31	
N-Nitrosodimethylamine	ug/L	ND	5.0	07/10/14 07:31	
N-Nitrosodiphenylamine	ug/L	ND	10.0	07/10/14 07:31	
Naphthalene	ug/L	ND	5.0	07/10/14 07:31	
Nitrobenzene	ug/L	ND	5.0	07/10/14 07:31	
Pentachlorophenol	ug/L	ND	10.0	07/10/14 07:31	
Phenanthrene	ug/L	ND	5.0	07/10/14 07:31	
Phenol	ug/L	ND	5.0	07/10/14 07:31	
Pyrene	ug/L	ND	5.0	07/10/14 07:31	
2,4,6-Tribromophenol (S)	%	62	10-137	07/10/14 07:31	
2-Fluorobiphenyl (S)	%	69	15-120	07/10/14 07:31	
2-Fluorophenol (S)	%	39	10-120	07/10/14 07:31	
Nitrobenzene-d5 (S)	%	66	10-120	07/10/14 07:31	
Phenol-d6 (S)	%	28	10-120	07/10/14 07:31	
Terphenyl-d14 (S)	%	80	11-131	07/10/14 07:31	

LABORATORY CONTROL SAMPLE: 1238248

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	25	14.8	59	44-142	
1,2-Dichlorobenzene	ug/L	25	15.0	60	32-129	
1,2-Diphenylhydrazine	ug/L	25	22.5	90	25-150	
1,3-Dichlorobenzene	ug/L	25	14.5	58	1-172	
1,4-Dichlorobenzene	ug/L	25	15.4	62	20-124	
2,4,6-Trichlorophenol	ug/L	25	18.0	72	37-144	
2,4-Dichlorophenol	ug/L	25	17.9	72	1-191	
2,4-Dimethylphenol	ug/L	25	19.5	78	32-119	
2,4-Dinitrophenol	ug/L	125	83.2	67	1-181	
2,4-Dinitrotoluene	ug/L	25	20.8	83	39-139	
2,6-Dinitrotoluene	ug/L	25	19.9	80	50-158	
2-Chloronaphthalene	ug/L	25	17.1	69	60-118	
2-Chlorophenol	ug/L	25	17.2	69	23-134	
2-Nitrophenol	ug/L	25	18.0	72	29-182	
3&4-Methylphenol(m&p Cresol)	ug/L	25	14.4	57	25-150	
3,3'-Dichlorobenzidine	ug/L	50	39.8	80	1-262	
4,6-Dinitro-2-methylphenol	ug/L	50	40.2	80	1-181	
4-Bromophenylphenyl ether	ug/L	25	20.2	81	53-127	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

METHOD BLANK: 1238247 Matrix: Water
Associated Lab Samples: 92208403001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Fluorene	ug/L	ND	5.0	07/10/14 07:31	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	07/10/14 07:31	
Hexachlorobenzene	ug/L	ND	5.0	07/10/14 07:31	
Hexachlorocyclopentadiene	ug/L	ND	10.0	07/10/14 07:31	
Hexachloroethane	ug/L	ND	5.0	07/10/14 07:31	
Indeno(1,2,3-cd)pyrene	ug/L	ND	5.0	07/10/14 07:31	
Isophorone	ug/L	ND	10.0	07/10/14 07:31	
N-Nitroso-di-n-propylamine	ug/L	ND	5.0	07/10/14 07:31	
N-Nitrosodimethylamine	ug/L	ND	5.0	07/10/14 07:31	
N-Nitrosodiphenylamine	ug/L	ND	10.0	07/10/14 07:31	
Naphthalene	ug/L	ND	5.0	07/10/14 07:31	
Nitrobenzene	ug/L	ND	5.0	07/10/14 07:31	
Pentachlorophenol	ug/L	ND	10.0	07/10/14 07:31	
Phenanthrene	ug/L	ND	5.0	07/10/14 07:31	
Phenol	ug/L	ND	5.0	07/10/14 07:31	
Pyrene	ug/L	ND	5.0	07/10/14 07:31	
2,4,6-Tribromophenol (S)	%	62	10-137	07/10/14 07:31	
2-Fluorobiphenyl (S)	%	69	15-120	07/10/14 07:31	
2-Fluorophenol (S)	%	39	10-120	07/10/14 07:31	
Nitrobenzene-d5 (S)	%	66	10-120	07/10/14 07:31	
Phenol-d6 (S)	%	28	10-120	07/10/14 07:31	
Terphenyl-d14 (S)	%	80	11-131	07/10/14 07:31	

LABORATORY CONTROL SAMPLE: 1238248

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	25	14.8	59	44-142	
1,2-Dichlorobenzene	ug/L	25	15.0	60	32-129	
1,2-Diphenylhydrazine	ug/L	25	22.5	90	25-150	
1,3-Dichlorobenzene	ug/L	25	14.5	58	1-172	
1,4-Dichlorobenzene	ug/L	25	15.4	62	20-124	
2,4,6-Trichlorophenol	ug/L	25	18.0	72	37-144	
2,4-Dichlorophenol	ug/L	25	17.9	72	1-191	
2,4-Dimethylphenol	ug/L	25	19.5	78	32-119	
2,4-Dinitrophenol	ug/L	125	83.2	67	1-181	
2,4-Dinitrotoluene	ug/L	25	20.8	83	39-139	
2,6-Dinitrotoluene	ug/L	25	19.9	80	50-158	
2-Chloronaphthalene	ug/L	25	17.1	69	60-118	
2-Chlorophenol	ug/L	25	17.2	69	23-134	
2-Nitrophenol	ug/L	25	18.0	72	29-182	
3&4-Methylphenol(m&p Cresol)	ug/L	25	14.4	57	25-150	
3,3'-Dichlorobenzidine	ug/L	50	39.8	80	1-262	
4,6-Dinitro-2-methylphenol	ug/L	50	40.2	80	1-181	
4-Bromophenylphenyl ether	ug/L	25	20.2	81	53-127	

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

LABORATORY CONTROL SAMPLE: 1238248

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Chlorophenylphenyl ether	ug/L	25	19.4	78	25-158	
4-Nitrophenol	ug/L	125	41.3J	33	1-132	
Acenaphthene	ug/L	25	18.5	74	47-145	
Acenaphthylene	ug/L	25	18.6	75	33-145	
Anthracene	ug/L	25	21.0	84	1-166	
Benzidine	ug/L	50	ND	5	25-150 L2	
Benzo(a)anthracene	ug/L	25	21.3	85	33-143	
Benzo(a)pyrene	ug/L	25	20.6	82	17-163	
Benzo(b)fluoranthene	ug/L	25	22.2	89	24-159	
Benzo(g,h,i)perylene	ug/L	25	21.2	85	1-219	
Benzo(k)fluoranthene	ug/L	25	20.8	83	11-162	
bis(2-Chloroethoxy)methane	ug/L	25	18.3	73	33-184	
bis(2-Chloroethyl) ether	ug/L	25	19.0	76	12-158	
bis(2-Chloroisopropyl) ether	ug/L	25	18.7	75	36-166	
bis(2-Ethylhexyl)phthalate	ug/L	25	23.1	92	8-158	
Butylbenzylphthalate	ug/L	25	23.0	92	1-152	
Chrysene	ug/L	25	21.9	88	17-168	
Di-n-butylphthalate	ug/L	25	22.2	89	1-118	
Di-n-octylphthalate	ug/L	25	21.0	84	4-146	
Dibenz(a,h)anthracene	ug/L	25	21.5	86	1-227	
Diethylphthalate	ug/L	25	21.2	85	1-114	
Dimethylphthalate	ug/L	25	20.9	84	1-112	
Fluoranthene	ug/L	25	20.7	83	26-137	
Fluorene	ug/L	25	19.8	79	59-121	
Hexachloro-1,3-butadiene	ug/L	25	13.9	56	24-116	
Hexachlorobenzene	ug/L	25	18.9	76	1-152	
Hexachlorocyclopentadiene	ug/L	25	12.3	49	25-150	
Hexachloroethane	ug/L	25	14.5	58	40-113	
Indeno(1,2,3-cd)pyrene	ug/L	25	16.5	66	1-171	
Isophorone	ug/L	25	19.0	76	21-196	
N-Nitroso-di-n-propylamine	ug/L	25	20.4	81	1-230	
N-Nitrosodimethylamine	ug/L	25	11.3	45	25-150	
N-Nitrosodiphenylamine	ug/L	25	20.8	83	25-150	
Naphthalene	ug/L	25	17.0	68	21-133	
Nitrobenzene	ug/L	25	18.7	75	35-180	
Pentachlorophenol	ug/L	50	34.9	70	14-176	
Phenanthrene	ug/L	25	20.0	80	54-120	
Phenol	ug/L	25	7.4	30	5-112	
Pyrene	ug/L	25	21.9	87	52-115	
2,4,6-Tribromophenol (S)	%			79	10-137	
2-Fluorobiphenyl (S)	%			72	15-120	
2-Fluorophenol (S)	%			39	10-120	
Nitrobenzene-d5 (S)	%			70	10-120	
Phenol-d6 (S)	%			28	10-120	
Terphenyl-d14 (S)	%			86	11-131	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1238249 1238250												
Parameter	Units	92208283002		MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual
		Result	Conc.	Spike	Spike	Result	Result	% Rec	% Rec	Limits	RPD	
1,2,4-Trichlorobenzene	ug/L	ND	25	25	25	18.6	18.7	74	75	44-142	1	30
1,2-Dichlorobenzene	ug/L	ND	25	25	25	18.6	18.9	74	75	32-129	2	30
1,2-Diphenylhydrazine	ug/L	ND	25	25	25	25.8	25.8	103	103	25-150	0	30
1,3-Dichlorobenzene	ug/L	ND	25	25	25	18.0	17.8	72	71	1-172	1	30
1,4-Dichlorobenzene	ug/L	ND	25	25	25	18.7	18.5	75	74	20-124	1	30
2,4,6-Trichlorophenol	ug/L	ND	25	25	25	20.1	21.0	80	84	37-144	4	30
2,4-Dichlorophenol	ug/L	ND	25	25	25	22.8	22.0	91	88	1-191	3	30
2,4-Dimethylphenol	ug/L	ND	25	25	25	23.5	24.3	94	97	32-119	4	30
2,4-Dinitrophenol	ug/L	ND	125	125	125	78.4	77.2	63	62	1-181	2	30
2,4-Dinitrotoluene	ug/L	ND	25	25	25	24.0	24.1	96	96	39-139	1	30
2,6-Dinitrotoluene	ug/L	ND	25	25	25	22.3	22.4	89	90	50-158	1	30
2-Chloronaphthalene	ug/L	ND	25	25	25	20.1	20.6	80	82	60-118	2	30
2-Chlorophenol	ug/L	ND	25	25	25	21.2	20.8	85	83	23-134	2	30
2-Nitrophenol	ug/L	ND	25	25	25	19.8	20.5	79	82	29-182	3	30
3&4-Methylphenol(m&p Cresol)	ug/L	ND	25	25	25	19.9	18.4	80	74	25-150	8	30
3,3'-Dichlorobenzidine	ug/L	ND	50	50	50	37.9	37.4	76	75	1-262	1	30
4,6-Dinitro-2-methylphenol	ug/L	ND	50	50	50	42.3	40.3	85	81	1-181	5	30
4-Bromophenylphenyl ether	ug/L	ND	25	25	25	22.3	22.3	89	89	53-127	0	30
4-Chlorophenylphenyl ether	ug/L	ND	25	25	25	23.0	23.0	92	92	25-158	0	30
4-Nitrophenol	ug/L	ND	125	125	125	75.1	70.9	60	57	1-132	6	30
Acenaphthene	ug/L	ND	25	25	25	21.6	22.5	86	90	47-145	4	30
Acenaphthylene	ug/L	ND	25	25	25	21.5	22.3	86	89	33-145	4	30
Anthracene	ug/L	ND	25	25	25	22.9	22.9	92	92	1-166	0	30
Benzidine	ug/L	ND	50	50	50	7J	6.5J	14	13	25-150		30 MO
Benzo(a)anthracene	ug/L	ND	25	25	25	22.9	23.2	92	93	33-143	1	30
Benzo(a)pyrene	ug/L	ND	25	25	25	22.1	22.7	89	91	17-163	2	30
Benzo(b)fluoranthene	ug/L	ND	25	25	25	22.3	22.2	89	89	24-159	0	30
Benzo(g,h,i)perylene	ug/L	ND	25	25	25	21.0	21.2	84	85	1-219	1	30
Benzo(k)fluoranthene	ug/L	ND	25	25	25	23.8	24.1	95	96	11-162	1	30
bis(2-Chloroethoxy)methane	ug/L	ND	25	25	25	21.7	21.5	87	86	33-184	1	30
bis(2-Chloroethyl) ether	ug/L	ND	25	25	25	23.2	23.3	93	93	12-158	0	30
bis(2-Chloroisopropyl) ether	ug/L	ND	25	25	25	23.0	23.1	92	92	36-166	0	30
bis(2-Ethylhexyl)phthalate	ug/L	ND	25	25	25	25.1	25.4	100	102	8-158	1	30
Butylbenzylphthalate	ug/L	ND	25	25	25	25.1	25.1	100	101	1-152	0	30
Chrysene	ug/L	ND	25	25	25	23.2	24.1	93	96	17-168	4	30
Di-n-butylphthalate	ug/L	ND	25	25	25	24.7	24.3	99	97	1-118	2	30
Di-n-octylphthalate	ug/L	ND	25	25	25	21.6	20.7	87	83	4-146	4	30
Dibenz(a,h)anthracene	ug/L	ND	25	25	25	21.0	20.9	84	84	1-227	0	30
Diethylphthalate	ug/L	ND	25	25	25	24.7	25.2	99	101	1-114	2	30
Dimethylphthalate	ug/L	ND	25	25	25	23.9	24.2	96	97	1-112	1	30
Fluoranthene	ug/L	ND	25	25	25	22.1	22.6	89	91	26-137	2	30
Fluorene	ug/L	ND	25	25	25	23.2	23.7	93	95	59-121	2	30
Hexachloro-1,3-butadiene	ug/L	ND	25	25	25	18.3	18.5	73	74	24-116	1	30
Hexachlorobenzene	ug/L	ND	25	25	25	20.0	20.6	80	82	1-152	3	30
Hexachlorocyclopentadiene	ug/L	ND	25	25	25	15.3	16.1	61	64	25-150	5	30

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1238249 1238250											
Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/L	ND	25	25	18.6	18.7	74	75	44-142	1	30
1,2-Dichlorobenzene	ug/L	ND	25	25	18.6	18.9	74	75	32-129	2	30
1,2-Diphenylhydrazine	ug/L	ND	25	25	25.8	25.8	103	103	25-150	0	30
1,3-Dichlorobenzene	ug/L	ND	25	25	18.0	17.8	72	71	1-172	1	30
1,4-Dichlorobenzene	ug/L	ND	25	25	18.7	18.5	75	74	20-124	1	30
2,4,6-Trichlorophenol	ug/L	ND	25	25	20.1	21.0	80	84	37-144	4	30
2,4-Dichlorophenol	ug/L	ND	25	25	22.8	22.0	91	88	1-191	3	30
2,4-Dimethylphenol	ug/L	ND	25	25	23.5	24.3	94	97	32-119	4	30
2,4-Dinitrophenol	ug/L	ND	125	125	78.4	77.2	63	62	1-181	2	30
2,4-Dinitrotoluene	ug/L	ND	25	25	24.0	24.1	96	96	39-139	1	30
2,6-Dinitrotoluene	ug/L	ND	25	25	22.3	22.4	89	90	50-158	1	30
2-Chloronaphthalene	ug/L	ND	25	25	20.1	20.6	80	82	60-118	2	30
2-Chlorophenol	ug/L	ND	25	25	21.2	20.8	85	83	23-134	2	30
2-Nitrophenol	ug/L	ND	25	25	19.8	20.5	79	82	29-182	3	30
3&4-Methylphenol(m&p Cresol)	ug/L	ND	25	25	19.9	18.4	80	74	25-150	8	30
3,3'-Dichlorobenzidine	ug/L	ND	50	50	37.9	37.4	76	75	1-262	1	30
4,6-Dinitro-2-methylphenol	ug/L	ND	50	50	42.3	40.3	85	81	1-181	5	30
4-Bromophenylphenyl ether	ug/L	ND	25	25	22.3	22.3	89	89	53-127	0	30
4-Chlorophenylphenyl ether	ug/L	ND	25	25	23.0	23.0	92	92	25-158	0	30
4-Nitrophenol	ug/L	ND	125	125	75.1	70.9	60	57	1-132	6	30
Acenaphthene	ug/L	ND	25	25	21.6	22.5	86	90	47-145	4	30
Acenaphthylene	ug/L	ND	25	25	21.5	22.3	86	89	33-145	4	30
Anthracene	ug/L	ND	25	25	22.9	22.9	92	92	1-166	0	30
Benzidine	ug/L	ND	50	50	7J	6.5J	14	13	25-150	30	MO
Benzo(a)anthracene	ug/L	ND	25	25	22.9	23.2	92	93	33-143	1	30
Benzo(a)pyrene	ug/L	ND	25	25	22.1	22.7	89	91	17-163	2	30
Benzo(b)fluoranthene	ug/L	ND	25	25	22.3	22.2	89	89	24-159	0	30
Benzo(g,h,i)perylene	ug/L	ND	25	25	21.0	21.2	84	85	1-219	1	30
Benzo(k)fluoranthene	ug/L	ND	25	25	23.8	24.1	95	96	11-162	1	30
bis(2-Chloroethoxy)methane	ug/L	ND	25	25	21.7	21.5	87	86	33-184	1	30
bis(2-Chloroethyl) ether	ug/L	ND	25	25	23.2	23.3	93	93	12-158	0	30
bis(2-Chloroisopropyl) ether	ug/L	ND	25	25	23.0	23.1	92	92	36-166	0	30
bis(2-Ethylhexyl)phthalate	ug/L	ND	25	25	25.1	25.4	100	102	8-158	1	30
Butylbenzylphthalate	ug/L	ND	25	25	25.1	25.1	100	101	1-152	0	30
Chrysene	ug/L	ND	25	25	23.2	24.1	93	96	17-168	4	30
Di-n-butylphthalate	ug/L	ND	25	25	24.7	24.3	99	97	1-118	2	30
Di-n-octylphthalate	ug/L	ND	25	25	21.6	20.7	87	83	4-146	4	30
Dibenz(a,h)anthracene	ug/L	ND	25	25	21.0	20.9	84	84	1-227	0	30
Diethylphthalate	ug/L	ND	25	25	24.7	25.2	99	101	1-114	2	30
Dimethylphthalate	ug/L	ND	25	25	23.9	24.2	96	97	1-112	1	30
Fluoranthene	ug/L	ND	25	25	22.1	22.6	89	91	26-137	2	30
Fluorene	ug/L	ND	25	25	23.2	23.7	93	95	59-121	2	30
Hexachloro-1,3-butadiene	ug/L	ND	25	25	18.3	18.5	73	74	24-116	1	30
Hexachlorobenzene	ug/L	ND	25	25	20.0	20.6	80	82	1-152	3	30
Hexachlorocyclopentadiene	ug/L	ND	25	25	15.3	16.1	61	64	25-150	5	30

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1238249 1238250											
Parameter	Units	92208283002	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	Max
		Result	Spike	Spike							
			Conc.	Conc.	Result	Result	% Rec	% Rec			RPD
Hexachloroethane	ug/L	ND	25	25	18.3	18.6	73	75	40-113	2	30
Indeno(1,2,3-cd)pyrene	ug/L	ND	25	25	17.1	17.3	68	69	1-171	1	30
Isophorone	ug/L	ND	25	25	23.3	22.2	93	89	21-196	4	30
N-Nitroso-di-n-propylamine	ug/L	ND	25	25	23.5	23.5	94	94	1-230	0	30
N-Nitrosodimethylamine	ug/L	ND	25	25	18.3	16.9	73	68	25-150	8	30
N-Nitrosodiphenylamine	ug/L	ND	25	25	22.8	22.9	91	92	25-150	1	30
Naphthalene	ug/L	ND	25	25	20.9	21.3	84	85	21-133	2	30
Nitrobenzene	ug/L	ND	25	25	22.1	22.7	89	91	35-180	3	30
Pentachlorophenol	ug/L	ND	50	50	35.0	32.9	70	66	14-176	6	30
Phenanthrene	ug/L	ND	25	25	22.0	22.1	88	88	54-120	0	30
Phenol	ug/L	ND	25	25	13.1	12.9	53	51	5-112	2	30
Pyrene	ug/L	ND	25	25	23.7	25.0	95	100	52-115	5	30
2,4,6-Tribromophenol (S)	%						80	80	10-137		
2-Fluorobiphenyl (S)	%						79	82	15-120		
2-Fluorophenol (S)	%						59	56	10-120		
Nitrobenzene-d5 (S)	%						81	84	10-120		
Phenol-d6 (S)	%						51	47	10-120		
Terphenyl-d14 (S)	%						92	96	11-131		

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

QC Batch: WETA/19663 Analysis Method: EPA 420.4
QC Batch Method: EPA 420.4 Analysis Description: 420.4 Phenolics
Associated Lab Samples: 92208403001

METHOD BLANK: 1246862 Matrix: Water
Associated Lab Samples: 92208403001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenol	mg/L	ND	0.0050	07/22/14 20:40	

LABORATORY CONTROL SAMPLE: 1246863

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenol	mg/L	.05	0.051	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1246864 1246865

Parameter	Units	92208302001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Phenol	mg/L	0.075	.05	.05	0.14	0.14	134	120	90-110	5 20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1246866 1246867

Parameter	Units	92208352012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Phenol	mg/L	4.3	.05	.05	3.9	3.9	-640	-740	90-110	1 20	M6

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REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

QC Batch: WETA/19663 Analysis Method: EPA 420.4
QC Batch Method: EPA 420.4 Analysis Description: 420.4 Phenolics
Associated Lab Samples: 92208403001

METHOD BLANK: 1246862 Matrix: Water
Associated Lab Samples: 92208403001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenol	mg/L	ND	0.0050	07/22/14 20:40	

LABORATORY CONTROL SAMPLE: 1246863

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenol	mg/L	.05	0.051	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1246864 1246865

Parameter	Units	92208302001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phenol	mg/L	0.075	.05	.05	0.14	0.14	134	120	90-110	5	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1246866 1246867

Parameter	Units	92208352012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phenol	mg/L	4.3	.05	.05	3.9	3.9	-640	-740	90-110	1	20	M6

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QUALITY CONTROL DATA

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

QC Batch: WETA/19618	Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E	Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 92208403001	

METHOD BLANK: 1244522 Matrix: Water
Associated Lab Samples: 92208403001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	07/20/14 11:26	

LABORATORY CONTROL SAMPLE: 1244523

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.12	117	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1244524 1244525

Parameter	Units	92208352005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Cyanide	mg/L	ND	.1	.1	0.12	0.12	115	117	75-125	2	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1244526 1244527

Parameter	Units	92208448009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Cyanide	mg/L	ND	.1	.1	0.036	0.13	33	123	75-125	111	20 M1,R1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

QUALIFIERS

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Acid preservation may not be appropriate for 2-Chloroethylvinyl ether, Styrene, and Vinyl chloride.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-C Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, Inc..

QUALIFIERS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: EXPANDED EFFLUENT TESTING
Pace Project No.: 92208403

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92208403001	EFFLUENT	EPA 200.7	MPRP/16418	EPA 200.7	ICP/14833
92208403001	EFFLUENT	EPA 245.1	MERP/6838	EPA 245.1	MERC/6588
92208403001	EFFLUENT	EPA 625	OEXT/28749	EPA 625	MSSV/9375
92208403001	EFFLUENT	EPA 624	MSV/27673		
92208403001	EFFLUENT	EPA 420.4	WETA/19663		
92208403001	EFFLUENT	SM 4500-CN-E	WETA/19618		

REPORT OF LABORATORY ANALYSIS



Document Name:
Sample Condition Upon Receipt (SCUR)
Document Number:
F-CHR-CS-003-rev.14

Document Revised: April 07, 2014
Page 1 of 2
Issuing Authority:
Pace Huntersville Quality Office

Client Name: Town of Purcellville

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Optional
Proj. Dir. Date
Proj. Name

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used: IR Gun T1102 **T1401** Type of Ice: Wet Blue None ☒ Samples on ice, cooling process has begun

Temp Correction Factor T1102: No Correction T1301: No Correction

Corrected Cooler Temp.: 2.7 °C Biological Tissue is Frozen: Yes No N/A

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: AW 7/9/14

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. Sample IDs say effluent composite - ALL
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Samples checked for dechlorination:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15. Sample 5 - one vial has bubbles
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

SCURF Review: SM

Date: 7/9/14

SRF Review: SOB

Date: 7/9/14

WO#: 92208403



Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Document Name:
Sample Condition Upon Receipt (SCUR)
Document Number:
F-CHR-CS-003-rev.14

Document Revised: April 07, 2014
Page 1 of 2
Issuing Authority:
Pace Huntersville Quality Office

Client Name: Town of Purcellville

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used: IR Gun T1102 **T1401** Type of Ice: Wet Blue None ☒ Samples on ice, cooling process has begun

Temp Correction Factor T1102: No Correction T1301: No Correction

Corrected Cooler Temp.: 2.7 °C Biological Tissue is Frozen: Yes No N/A

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: aws 7/9/14

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
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Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

SCURF Review: Sm

Date: 7/9/14

SRF Review: JDG

Date: 7/6/14

WO#: 92208403



92208403

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: <u>1</u> of <u>1</u>	
Company: <u>Town of Purcellville</u>		Report To: <u>Scott House</u>		Attention: <u>Jenny Austin</u>		1789782	
Address: <u>1001 S. 20th St.</u>		Copy To: <u>Susan Davis</u>		Company Name: <u>Town of Purcellville</u>			
City/State/Zip: <u>Purcellville, VA 20132</u>		Email To: <u>sdavis1@purcellvilleva.gov</u>		Address: <u>221 Nursery Ave., Purc.</u>		REGULATORY AGENCY	
Phone: <u>540-338-4945</u> Fax: <u>540-338-0369</u>		Purchase Order No.: <u>22275</u>		Pace Quote Reference:		<input checked="" type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Requested Due Date/TAT: <u>12 days</u>		Project Name: <u>Expanded Effluent Testing</u>		Pace Project Manager: <u>Jon Bradley</u>		Site Location	
		Project Number: <u>Bottle Order # 53746</u>		Pace Profile #: <u>3741-2</u>		STATE: <u>VA</u>	

Section D Required Client Information		Matrix Codes MATRIX / CODE		COLLECTED		COMPOSITE		DATE		TIME		SAMPLE TEMP AT COLLECTION		# OF CONTAINERS		Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)			
ITEM #	SAMPLE ID (A-Z, 0-9 / -)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME
1	Effluent	WW	C	7-8-14	07:30	7-8-14	07:30																						
2	Effluent	WW	C	7-8-14	07:30	7-8-14	07:30																						
3	Effluent	WW	C	7-8-14	07:30	7-8-14	07:30																						
4	Effluent	WW	C	7-8-14	07:30	7-8-14	07:30																						
5	Effluent	WW	C	7-8-14	07:30	7-8-14	07:30																						
6																													
7																													
8																													
9																													
10																													
11																													
12																													

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS	
* 1 amber vial crushed from shipping - talked to Jon Bradley and he allowed 2 vials were enough.		Susan E. Davis		7-8-14		3:15		Andrew Smart		7/9/14		0435		2.7 Y N Y	
SAMPLER NAME AND SIGNATURE		PRINT Name of SAMPLER:		SIGNATURE of SAMPLER:		DATE Signed (MM/DD/YY):		Temp in °C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)	

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.